UNICORN STOCK OPTIONS—GOLDEN GOOSE OR TROJAN HORSE?

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Large privately held startups valued at $1 billion or more ("unicorns") are grappling with how to deal with employees' expectations caused by the illiquidity of the shares of stock acquired upon exercise of their options. Until about eight years ago, many talented workers chose to work for a startup company for a lower cash salary combined with a substantial stock option grant and the dream of cashing out for a large sum of money after an initial public offering ("IPO") of the startup's stock.

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Today, unicorns remain private for extended periods of time, in part, because they are often no longer dependent on an IPO or a trade sale to raise sufficient capital. As a result, they are delaying liquidity events for their founders, employees, and investors, thereby causing their employee stock options to lose some of their allure as a hiring and retention device.

This Article examines a contemporary puzzle in Silicon Valley: Is there a shift in unicorn employees' expectations that results in labor contract renegotiations? To answer this question, this Article explores the challenges faced by unicorn firms as repeat players in competitive technology markets and offers the following possible solutions. First, it proposes new equity-based compensation contracts, and critiques them. Second, it suggests alternatives to the traditional liquidity mechanisms, and critiques them. Unfortunately, current securities and tax laws create legal barriers to private ordering, which prevent the parties from solving these issues on their own. This Article concludes with proposals to remove these legal barriers to private ordering to allow for the proposed solutions to take hold, accompanied with new mandatory disclosure requirements to limit the risks.

> "[W]e have thousands of employees that own stock [who gave] their blood, sweat, and tears to make Uber a great company. . . . I say we are going to IPO as late as humanly possible. It'll be one day before my employees and significant others come to my office with pitchforks and torches."
> – Travis Kalanick, former CEO of Uber[1]

[1] Sam Shead, *Uber's CEO Says He's Leaving It 'As Late as Humanly Possible' to Go Public*, BUS. INSIDER (June 9, 2016), https://www.businessinsider.com/uber-ceo-travis-kalanick-ipo-plan-2016-6 [https://perma.cc/6SJG-N8L5].

> "One of the many tradeoffs that early startup employees choose to make is between cash, and options. For some employees, however, this may end up being a Faustian bargain of sorts."
> – Scott Kupor, managing partner of Andreessen Horowitz[2]

I. INTRODUCTION: NEW "TECH BUBBLE" PUZZLE

With the declining U.S. market for initial public offerings ("IPOs"),[3] caused in part by the availability of new private capital sources,[4] there has been a corresponding rise in the

[2] Scott Kupor, *The Lack of Options for (Startup Employees') Options*, ANDREESSEN HOROWITZ (June 23, 2013), https://a16z.com/2016/06/23/options-timing/ [https://perma.cc/ZZ3D-V4TQ].

[3] The decline in IPOs has gained attention from the media, policymakers, and academics. *See Oversight of the U.S. Securities and Exchange Commission: Hearing Before the Comm. on Banking, Hous., & Urban Affairs*, 115th Cong. 39–41 (2017) (statement of Jay Clayton, Chairman, Securities and Exchange Commission); Elisabeth de Fontenay, *The Deregulation of Private Capital and the Decline of the Public Company*, 68 HASTINGS L.J. 445, 454–55 (2017); Adley Bowden & Andy White, *Private vs. Public Market Investors: Who's Reaping the Gains from the Rise of Unicorns*?, PRIV. MKT. PLAYBOOK, Q2 2018, at 4–7, https://files.pitchbook.com/website/files/pdf/2Q_2018_PitchBook_PlayBook_Digital.pdf [https://perma.cc/6WF9-L2S5]; Corrie Driebusch, *IPO Market Isn't Quite Back as Many Startups Are Still Holding Out*, WALL ST. J. (July 5, 2017), https://www.wsj.com/articles/ipo-market-isnt-quite-back-as-many-startups-are-still-holding-out-1499252401 (on file with the *Columbia Business Law Review*); Scott Kupor, *Where Have All the IPOs Gone*, ANDREESSEN HOROWITZ (June 19, 2017), https://a16z.com/2017/06/19/ipos/ [https://perma.cc/A6MV-Y329]; Keith Wright, *Silicon Valley Tech Bubble Is Larger Than It Was in 2000, and the End Is Coming*, CNBC (May 22, 2018), https://www.cnbc.com/2018/05/22/tech-bubble-is-larger-than-in-2000-and-the-end-is-coming.html [https://perma.cc/V6D7-DA5W].

[4] *See* Sergey Chernenko, Josh Lerner & Yao Zeng, *Mutual Funds as Venture Capitalists? Evidence from Unicorns* (Harvard Bus. Sch., Working Paper No. 18-037, 2017), https://www.hbs.edu/faculty/Publication%20Files/18-037_02aee6d2-1209-449e-84df-c3730b4d7b4b.pdf [https://perma.cc/RUR9-T2Y8]; Les Brorsen, *Looking Behind the Declining Number of Public Companies*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (May 18, 2017), https://corpgov.law.harvard.edu/2017/05/18/looking-

number of privately held firms that are valued at $1 billion or more (so-called "unicorns").[5] Whereas, in the recent past, startups tended to go public or be sold approximately four years after founding, today the average time to IPO or sale is eleven years.[6]

behind-the-declining-number-of-public-companies/ [https://perma.cc/N8KX-ZLY5]; Matt Levine, Opinion, *Unicorns Take Different Paths to Being Public*, BLOOMBERG (Mar. 27, 2018), https://www.bloomberg.com/opinion/articles/2018-03-27/unicorns-take-different-paths-to-being-public [https://perma.cc/PJH3-NLGZ] ("[L]ate-stage private investors now are doing the job that the post-IPO public investors used to do[.]"); MCKINSEY & CO., THE RISE AND RISE OF PRIVATE MARKETS: MCKINSEY GLOBAL PRIVATE MARKETS REVIEW 2018, at 1 (2018), https://www.mckinsey.com/~/media/McKinsey/Industries/Private%20Equity%20and%20Principal%20Investors/Our%20Insights/The%20rise%20and%20rise%20of%20private%20equity/The-rise-and-rise-of-private-markets-McKinsey-Global-Private-Markets-Review-2018.ashx [https://perma.cc/YP2H-VUEB] ("Private asset managers raised a record sum of nearly $750 billion globally, extending a cycle that began eight years ago.").

5 A unicorn has the following features for the purposes of this Article: young but large, privately owned but "quasi-public," invests in research and development (R&D) with intangible assets, venture capital-backed with concentrated ownership and controlling shareholders, and valued at over $1 billion. The term "unicorn" was coined in 2013 by Aileen Lee. *See* Aileen Lee, *Welcome to the Unicorn Club: Learning from Billion-Dollar Startups*, TECHCRUNCH (Nov. 2, 2013), https://techcrunch.com/2013/11/02/welcome-to-the-unicorn-club/ [https://perma.cc/7WQP-NG6S]; *see also* Abraham J.B. Cable, *Fool's Gold? Equity Compensation & the Mature Startup*, 11 VA. L. & BUS. REV. 613, 615 (2017); Jennifer S. Fan, *Regulating Unicorns: Disclosure and the New Private Economy*, 57 B.C. L. REV. 583, 586 (2016).

6 *See* Jamie Hutchinson, *Why Are More Companies Staying Private?*, GOODWIN (Feb. 15, 2017), https://www.sec.gov/info/smallbus/acsec/hutchinson-goodwin-presentation-acsec-021517.pdf [https://perma.cc/3MP9-8FTM]; *see also* Begum Erdogan, Rishi Kant, Allen Miller & Kara Sprague, *Grow Fast or Die Slow: Why Unicorns Are Staying Private*, MCKINSEY & CO. (May 2016), https://www.mckinsey.com/industries/high-tech/our-insights/grow-fast-or-die-slow-why-unicorns-are-staying-private [https://perma.cc/RD4K-MDUD]; Matt Levine, *Unicorn Buybacks and Securities Law*, BLOOMBERG (Feb. 16, 2017), https://www.bloomberg.com/view/articles/2017-02-16/unicorn-buybacks-and-securities-law (on file with the *Columbia Business Law Review*). For more information on the decline in the U.S. IPO market, see generally Craig

Eight years ago, it was inconceivable that a venture capital ("VC")-backed startup could reach an aggressive valuation of over $1 billion without going public.[7] But today CB Insights, CNNMoney, *Fortune*, and *The Wall Street Journal* each keep a list of such companies and their valuations, and the lists keep growing.[8] The United States has the largest concentration of unicorns in the world, and an estimated $700

Doidge, Kathleen M. Kahle, G. Andrew Karolyi & René M. Stulz, *Eclipse of the Public Corporation or Eclipse of the Public Markets?*, J. APPLIED CORP. FIN., Winter 2018, at 8 [hereinafter Doidge et al., *Eclipse of the Public Corporation*]; Craig Doidge, G. Andrew Karolyi & René M. Stulz, *The U.S. Left Behind? Financial Globalization and the Rise of IPOs Outside the U.S.*, 110 J. FIN. ECON. 546 (2013) [hereinafter Doidge et al., *The U.S. Left Behind*]; Craig Doidge, G. Andrew Karolyi & René M. Stulz, *The U.S. Listing Gap*, 123 J. FIN. ECON. 464 (2017) [hereinafter Doidge et al., *The U.S. Listing Gap*]; Xiaohui Gao, Jay R. Ritter & Zhongyan Zhu, *Where Have All the IPOs Gone?*, 48 J. FIN. &. QUANTITATIVE ANALYSIS 1663 (2013).

[7] *See* David Cogman & Alan Lau, *The 'Tech Bubble' Puzzle*, MCKINSEY Q., no. 3, at 103, 104 (2016).

[8] *See* Scott Austin, Chris Canipe & Sarah Slobin, *The Billion Dollar Startup Club*, WALL ST. J., https://www.wsj.com/graphics/billion-dollar-club/ (on file with the *Columbia Business Law Review*) (last updated Dec. 2018) (showing list and valuation of firms as of Dec. 2018); *Billion Dollar Startups*, CNN TECH, https://money.cnn.com/interactive/technology/billion-dollar-startups/ [https://perma.cc/MR2M-7598] (last updated June 29, 2018); *The Global Unicorn Club*, CB INSIGHTS, https://www.cbinsights.com/research-unicorn-companies [https://perma.cc/4S6H-TZKB]; *The Unicorn List*, FORTUNE, http://fortune.com/unicorns/ [https://perma.cc/F7HC-MX64] (last updated Jan. 19, 2016); *see also* Ben Zimmer, *How 'Unicorns' Became Silicon Valley Companies*, WALL ST. J. (Mar. 20, 2015) http://www.wsj.com/articles/how-unicorns-became-silicon-valley-companies-1426861606 (on file with the *Columbia Business Law Review*). Companies that are valued at over $10 billion are called "decacorns". *See* Sarah Frier & Eric Newcomer, *The Fuzzy, Insane Math That's Creating So Many Billion-Dollar Tech Companies*, BLOOMBERG (Mar. 17, 2015), https://www.bloomberg.com/news/articles/2015-03-17/the-fuzzy-insane-math-that-s-creating-so-many-billion-dollar-tech-companies (on file with the *Columbia Business Law Review*) (coining the term decacorns); *see also* Jillian D'Onfro, *There Are So Many $10 Billion Startups That There's a New Name for Them: 'Decacorns'*, BUS. INSIDER (Mar. 18, 2015), http://www.businessinsider.com/decacorn-is-the-new-unicorn-2015-3 [https://perma.cc/8VFS-GDGT].

billion in unrealized value "is currently locked up in" these firms.[9] By staying private and not pursuing an IPO or sale, unicorns are delaying liquidity events for their shareholders, including their employees.[10]

High employee turnover hurts a firm's bottom line. Unicorn firms are dealing with the highest turnover rates of knowledgeable employees among tech disruptors.[11] despite the fact that they generally offer their employees a competitive salary and the highest annual equity awards.[12] This raises the question—even though unicorns do not need public markets to raise money, do they need them to attract, engage, and retain their talent?

This Article builds on the work of Rock and Wachter[13] and postulates that capital lock-in is important for startup

[9] In 2017 alone, "22% of the capital invested in the US was part of a deal valuing a company at $1 billion or more." *See* PITCHBOOK, UNICORN REPORT 2017 ANNUAL 3 (2017) https://pitchbook.com/news/reports/2017-annual-unicorn-report (on file with the *Columbia Business Law Review*).

[10] *See* Erdogan et al., *supra* note 6 ("[P]rivate-market activity has ticked up significantly as employees and investors alike seek liquidity."); *see also* Andy Kessler, Opinion, *Unicorns Need IPOs*, WALL ST. J. (Jan. 7, 2018), https://www.wsj.com/articles/unicorns-need-ipos-1515361043 (on file with the *Columbia Business Law Review*) ("The economy needs this. The more companies are publicly traded, the more information quickly gets into the market. This is especially important in innovative industries. And for several years now, venture capitalists have been putting more into startups than they have been taking out in exits. That can't last forever. Capitalism can't perform at its highest potential with large opaque companies.").

[11] *See* Amir Efrati & Peter Schultz, *How Tech Firms Stack on Pay*, INFORMATION (Sept. 13, 2016), https://www.theinformation.com/articles/how-tech-firms-stack-up-on-pay [https://perma.cc/GA3C-RGDY]; *see also* Tim Johnson, *The Real Problem with Tech Professionals: High Turnover*, FORBES (June 29, 2018), https://www.forbes.com/sites/forbesbusinessdevelopmentcouncil/2018/06/29/the-real-problem-with-tech-professionals-high-turnover/#37ddb3164201 [https://perma.cc/GRE2-BGT4].

[12] This Article uses the terms "equity awards" or "compensation" broadly to include promises of equity (whether stock options or restricted stock units).

[13] The private startup company legal form is set to "lock-in parties while developing vulnerable match-specific assets." Edward B. Rock & Michael L. Wachter, *Waiting for the Omelet to Set: Match-Specific Assets*

companies, including large unicorns, because the cost of investing in innovation-driven products or services is very high and risky. In order to allow startup firms to continue to raise capital, investors cannot easily threaten to exit and to withdraw their investment from the firm. It is thus important to turn to the changes in the market, the rise in investors with aggressive redemption rights, and the ways this rise changes the traditional governance structure of VC-backed unicorn firms.

But there has been relatively little discussion in the literature on how changes to U.S. capital markets and recent legislation affect the behavior of unicorns as a repeat player in competitive technology markets, where companies aggressively compete for talent—i.e., knowledgeable employees.[14] This Article fills that gap. It explores how U.S.

and Minority Oppression in Close Corporations, 24 J. CORP. L. 913, 919 (1999).

[14] For insights on equity compensation, see generally MICHAEL B. DORFF, INDISPENSABLE AND OTHER MYTHS: WHY THE CEO PAY EXPERIMENT FAILED AND HOW TO FIX IT (2014) (questioning the theoretical foundation for incentive pay and advocating for salary-based executive pay); ALAN HYDE, WORKING IN SILICON VALLEY: ECONOMIC AND LEGAL ANALYSIS OF A HIGH-VELOCITY LABOR MARKET (2003) (providing a comprehensive overview of the Silicon Valley labor market and compensation practices); Robert Anderson IV, *Employee Incentives and the Federal Securities Laws*, 57 U. MIAMI L. REV. 1195, 1217–52 (2003) (discussing the status of employee options as securities); Matthew T. Bodie, *Aligning Incentives with Equity: Employee Stock Options and Rule 10b-5*, 88 IOWA L. REV. 539 (2003) (focusing on the availability of Rule 10b-5 actions); Thomas A. Smith, *The Zynga Clawback: Shoring Up the Central Pillar of Innovation*, 53 SANTA CLARA L. REV. 577, 589–606 (2013) (focusing on the law and economics of equity compensation as private ordering); Yifat Aran, Note, *Beyond Covenants Not to Compete: Equilibrium in High-Tech Startup Labor Markets*, 70 STAN. L. REV. 1235, 1235 (2018) (discussing California's public policy against noncompete enforcement and the new employee stock options market and noting that "employees at less successful firms can move to competitors at little or no cost, but valuable employees of successful private firms are, practically, handcuffed just as if they were subject to a powerful noncompete."); Michael C. Jensen & Kevin J. Murphy, *CEO Incentives—It's Not How Much You Pay, but How*, HARV. BUS. REV., May–June 1990, at 138, 141 (advocating for equity compensation as a form of incentive-based executive pay).

technology companies engage in a "war for talent,"[15] a phenomenon that will continue to define the industry's competitive landscape for years to come.[16]

This Article examines this Silicon Valley puzzle—is there a shift in unicorn employee expectations that results in labor contract renegotiations? The answer is yes: The challenges that unicorn firms face as repeat players in competitive technology markets and the consequences of failing to meet their employees' expectations have resulted in labor contract renegotiations. However, current securities and tax laws create legal barriers to private ordering, which prevent the parties from solving these issues on their own.

The Article offers the following possible solutions. First, it proposes new equity-based compensation contracts for different types of employees (rank-and-file, managers, and founders) than those typically entered into today. Second, it explores alternatives to the traditional liquidity mechanism and offers the shortcomings of these possible alternatives. Third, it suggests new mandatory disclosure requirements, proposals to removing the legal barriers to private ordering, and the solutions provided, and complications created by, these suggested regulatory changes.

The Securities and Exchange Commission ("SEC") is also concerned with these challenges. In fact, the agency is exploring new rules that would make it easier for unicorns

[15] "The term 'war on talent' was coined by McKinsey's Steven Hankin in 1997 and popularized by the book of that name in 2001." Scott Keller & Mary Meaney, *Attracting and Retaining the Right Talent*, MCKINSEY & CO. (Nov. 2017), https://www.mckinsey.com/business-functions/organization/our-insights/attracting-and-retaining-the-right-talent [https://perma.cc/G4C5-293G]; *see also* Shira Ovide, Opinion, *Honey, I Shrunk Apple's Profit Margins,* BLOOMBERG (Aug. 2, 2018), https://www.bloomberg.com/view/articles/2018-08-02/apple-aapl-at-1-trillion-honey-i-shrunk-the-profit-margins (on file with the *Columbia Business Law Review*) ("U.S. technology titans are in an arms race[.]").

[16] *See* Elizabeth G. Chambers, Mark Foulon, Helen Handfield-Jones, Steven M. Hankin & Edward G. Michaels III, *The War for Talent*, MCKINSEY Q., 1998 Number 3, at 44, 46; *see also* Ovide, *supra* note 15.

"to compensate their workers by giving them stock in the company."[17]

Traditional employee equity contracts were not designed to prevent the heretofore unforeseen contingency of startups remaining private for significantly longer. This delayed timeline pre-IPO affects employee equity contracts and can trigger conflicts between employees and employers. Specifically, the major unicorn common shareholders (typically the founders)[18] have greater power vis-à-vis preferred shareholders and minority common shareholders to prevent a sale and keep the company private longer.[19] According to incomplete contracting theory,[20] this conflict, which results from new market dynamics and changes to unicorn startup governance arrangements, leads to renegotiation of employee equity compensation agreements.

Equity compensation arrangements are customary in California, because they can incentivize retention and California labor law does not enforce non-compete clauses in

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17 *See* Dave Michaels, *SEC Chairman Wants to Let More Main Street Investors in on Private Deals*, WALL ST. J. (Aug. 30, 2018), https://www.wsj.com/articles/sec-chairman-wants-to-let-more-main-street-investors-in-on-private-deals-1535648208 (on file with the *Columbia Business Law Review*).

18 *See* Michael Ewens & Joan Farre-Mensa, *The Deregulation of the Private Equity Markets and the Decline in IPOs* 1 (Dec. 26, 2018) (unpublished manuscript), https://ssrn.com/abstract=3017610 [https://perma.cc/S859-WT5F] ("The IPO decline is . . . . the result of founders taking advantage of their increased bargaining power and lower cost of being private to realize their preference for control by choosing to remain private.").

19 *See infra* Part III.

20 *See* Philippe Aghion & Patrick Bolton, *An Incomplete Contracts Approach to Financial Contracting*, 59 REV. ECON. STUD. 473, 474 (1992) (explaining that sale of the firm can eliminate managers' positions and their private benefits); Brian Broughman & Jesse Fried, *Renegotiation of Cash Flow Rights in the Sale of VC-Backed Firms*, 95 J. FIN. ECON. 384, 387 (2009) ("[C]ommon shareholders thus might prefer keeping the firm independent in the hope that it is later sold for a higher price or undergoes an IPO in which the VCs are forced to convert to common[.]").

employment agreements.[21] Most unicorns are located in Silicon Valley,[22] and deal with employment contract renegotiations because of the common use of incentive equity compensation, such as stock options.[23]

In the past, many talented individuals chose to work for a startup company for a below-market cash salary with a substantial stock option grant, dreaming of cashing out for a large sum of money after the startup's IPO.[24] Yet, today, due to "lock-in" and illiquidity of unicorn shares, employees are faced with a dilemma—if their stock options are expiring, they must choose between forfeiting them (and consequently forfeiting their chances of getting rich) or exercising them and paying cash for shares that may turn out to be worth far less than the exercise price.[25] Because pre-IPO unicorn valuations are very high, many employees find that their options are prohibitively expensive due to liquidity constraints and tax concerns. There is a heated debate in Silicon Valley about whether the use of so-called "golden handcuffs," the ninety-day stock option exercise period applicable to departing employees, is fair or efficient due to these new market conditions.[26] At a minimum, golden handcuffs "lock in" employees who may prefer to work for a younger startup with

[21] *See generally* Richard A. Booth, *Give Me Equity or Give Me Death – The Role of Competition and Compensation in Silicon Valley*, 1 ENTREPRENEURIAL BUS. L.J. 265, 269 (2006); *see also* Aran, *supra* note 14, at 1238.

[22] For a list of states that have unicorn firms, see *The United States of Unicorns: Every US Company Worth $1B+ in One Map*, CBINSIGHTS (July 25, 2017), https://www.cbinsights.com/research/startup-unicorns-us-map/ [https://perma.cc/3G5T-3D29].

[23] In the past, renegotiations of labor contracts were driven mainly by debt overhang, a debt burden so large that an entity cannot take on additional debt to finance future projects, and incentivizing employees with underwater options. *See* Broughman & Fried, *supra* note 20, at 385. Today, as will be discussed *infra*, renegotiations are driven by the firm's decision to remain private longer and the illiquidity of its shares.

[24] *See infra* Part II.

[25] *See infra* Part II.

[26] *See infra* Part II.

more cutting-edge technology, and can thereby stifle innovation necessary for a growing economy[27]

The shift in employee expectations is evident from public employee complaints about their unicorn employers,[28] which not only causes reputational damage to employers[29] but also raises the cost of employee monitoring due to the increased reputational risk. These complaints are available in public reports from online data sites such as Glassdoor, showing dissatisfaction among unicorn employees, especially about extreme capital lock-in and stock illiquidity.[30]

In an effort to deal with these problems, various interest groups, including the National Venture Capital Association, have been successfully lobbying Congress for changes to tax and securities laws.[31] This Article will introduce the new substantive legislative changes, including the Tax Cuts and Jobs Act of 2017, which provides an extended deferral period to certain employees.[32] These changes are meant to deal with

[27] *See, e.g.*, Aran, *supra* note 14, at 1239–40 ("[T]he lock-in effect of stock options might significantly impede the departure of much-needed entrepreneurial talent from the most successful private firms.").

[28] Judith Samuelson, *Why Do We Still Call It Capitalism?*, QUARTZ (Apr. 9, 2018), https://work.qz.com/1247835/spotifys-ipo-should-make-us-consider-why-we-still-use-the-term-capitalism/ [https://perma.cc/H5GK-4H4D]. Unicorn employee complaints are not private anymore, as the "conversation has moved to employee hangouts, both virtual and real, to interview rooms on college campuses, and to public conversations about Board diversity, the glass ceiling, and in the talent pool." *Id.*

[29] For more on agency costs and reputation, see Eugene F. Fama, *Agency Problems and the Theory of the Firm*, 88 J. POL. ECON. 288, 291–92 (1980).

[30] These sites rank the "Best Companies to Work For," and employees pay "careful attention . . . to Employee Engagement Scores that link corporate reputation, employee motivation, and productivity." Samuelson, *supra* note 28.

[31] *See infra* notes 180–83 and accompanying text.

[32] *See* Richard Lieberman, *2017 Tax Act Impact on Employee Benefits and Executive Compensation*, LEXIS PRAC. ADVISOR J. (Apr. 18, 2018), https://www.lexisnexis.com/lexis-practice-advisor/the-journal/b/lpa/archive/2018/04/18/2017-tax-act-impact-on-employee-

the problem of inefficient retention function of unicorn stock option plans.

Uber Technologies, Inc. ("Uber")[33], the largest unicorn firm in the United States by equity valuation, helps illustrate the shift in employee expectations that has spurred renegotiations and high employee turnover at unicorns. Uber is currently dealing with high turnover rates of knowledgeable employees,[34] despite generally offering a competitive salary and the second-highest annual equity award in the industry.[35] Software engineers at Uber are better compensated than those working for Google,[36] Microsoft,[37] Amazon,[38] and Apple.[39] Uber continues to change its equity compensation contracts, however, because of the lock-in problem and illiquidity of its shares, and leads "the

benefits-and-executivecompensation.aspx [https://perma.cc/K6JP-FET7]; *see also infra* Section IV.A.2.

[33] Uber is a privately held firm that was founded in 2009. *See* Alison Griswold, *Former Uber Employees Have Gone into Debt to Hang onto Shares They Still Can't Sell*, QUARTZ (Dec. 10, 2017), https://qz.com/1149381/uber-softbank-shares-debt/ [https://perma.cc/KP8W-LUJP]. From 2013 to 2016, Uber's valuation increased from $3.5 billion to approximately $70 billion. *Id.*

[34] This paper uses the term "employee" very broadly to include any person who receives equity compensation, including rank and file staff and senior management.

[35] Uber pays a software engineer, on average, an annual equity compensation of $157,000. *See* Efrati & Schultz, *supra* note 11. In comparison, on average, Google pays $59,000, Microsoft pays $40,000, Apple pays $39,000, and Amazon pays $33,000. *See id.*

[36] Google pays a software engineer an average base salary of $132,000, an average annual equity of $59,000, an average annual bonus of $22,000, and an average signing bonus of $20,000 (total: $233,000). *Id.*

[37] Microsoft pays an average base salary of $135,000, an average annual equity of $40,000, an average annual bonus of $30,000, and an average signing bonus of $17,000 (total: $222,000). *Id.*

[38] Amazon pays an average base salary of $121,000, an average annual equity of $33,000, an average annual bonus of $19,000, and an average signing bonus of $30,000 (total: $203,000). *Id.*

[39] Apple pays an average base salary of $127,000, an average annual equity of $39,000, an average annual bonus of $20,000, and an average signing bonus of $22,000 (total: $208,000). *Id.*

race to the bottom, with 1.2 years [as] the average employee tenure."[40]

This Article explores the consequences of failing to meet employee expectations and offers possible solutions. Part II introduces the historical, economic, and legal evolution of employee stock option plans, starting with the standard stock option plan in Section II.A and the traditional governance structures of VC-backed startups in Section II.B. Section II.C describes the shift in employee expectations, which causes labor contract renegotiations aimed at addressing the problems of capital lock-in and illiquidity of unicorn stock.

Part III describes recent changes to U.S. capital markets, including regulatory changes, such as the Jumpstart Our Business Startups ("JOBS") Act of 2012, which affect unicorn firms' ability to stay private for longer periods of time. Section III.A provides an overview of the decline in IPOs. Section III.B presents the new private market participants, mutual funds and sovereign wealth funds, which invest large amounts of capital in unicorn firms. Section III.C argues that changes to the traditional startup financing model and to governance structures of VC-backed firms has increased the founders' ability to maintain control over the firm by preventing a sale, especially when VC-investment rounds are structured as "friendly" financing rounds.

Part IV discusses suggestions for dealing with the challenges faced by unicorns, their investors, and their employees and proposes possible solutions. Section IV.A

[40] Uber is also dealing with organizational and corporate culture problems, including leadership turnover and lawsuits over sexual misconduct. *See* Biz Carson, *Inside Uber's Effort to Fix Its Culture Through a Harvard-Inspired 'University'*, FORBES (Feb. 3, 2018), https://www.forbes.com/sites/bizcarson/2018/02/03/inside-ubers-effort-to-fix-its-culture-through-a-harvard-inspired-university/#7fcfbc5c1695 [https://perma.cc/M8G4-MQM5]. Airbnb, like Uber, is a unicorn with high employee turnover and a short employee tenure of 1.64 years, but has not dealt with these other problems. *See* Paysa Team, *The Top Talent of Tech Disruptors and Titans*, PAYSA (July 10, 2017), https://www.paysa.com/blog/the-top-talent-of-tech-disruptors-and-titans/ [https://perma.cc/AJC9-DZ5C]. There is also data on growth and number of employees of unicorns. *Id.*

presents contractual alternatives to the traditional stock option plan (and employee contract) and addresses potential pitfalls. Section IV.B describes alternatives to the traditional liquidity mechanisms and their possible issues.

Part V proposes new recommendations that could operate alongside these suggestions. Section V.A calls for protection of unicorn employees. Section V.B presents recent regulatory and legislative developments, including the Economic Growth, Regulatory Relief, and Consumer Protection Act and the Tax Cuts and Jobs Act, and provides constructive criticism of these developments. Urgent amendments and comprehensive reform to the current regulatory and legislative models are needed to remove legal barriers to private ordering. This Part then proposes new disclosure requirements to improve efficiency and reduce information asymmetries.

Finally, Part VI concludes with a call for reform to the current regulatory and legislative models, and recommends providing unicorn employees with liquidity opportunities and adequate disclosures that can improve efficiency and reduce information asymmetries. By increasing equitable and more sustainable employee participation in the operation of the unicorn firm, these changes can improve the prospects for unicorn companies.

II. EMPLOYEE STOCK OPTION PLANS

In the formation stages of a startup, founders "split the pie" with employees and investors. As noted above, individuals historically chose to work at high-risk startups for a modest cash salary with significant stock option grants, in the hopes that they could cash out for a large sum of money[41] after an

[41] *See* Ryan Decker, John Haltiwanger, Ron Jarmin & Javier Miranda, *The Role of Entrepreneurship in US Job Creation and Economic Dynamism*, 28 J. ECON. PERSP. 3, 4 (2014) ("[A] small fraction of young firms exhibit very high growth and contribute substantially to job creation.").

IPO of the startup's stock.[42] Employee option grants made it possible for employees to participate in the growth of the business without having to put significant amounts of capital at risk[43] or to pay income tax that would ordinarily be due on additional cash compensation.[44] This mechanism became popular due to the recognition that employee equity-sharing improves overall firm productivity, shareholder returns, and profit levels.[45]

From the employer's perspective, equity compensation preserves cash, which is a precious commodity for most early startup firms.[46] Because a startup firm's internal cash flow is typically insufficient to support[47] the firm's expanding

[42] *See* Joseph Blasi, Douglas Kruse & Richard Freeman, *Having a Stake: Evidence and Implications for Broad-Based Employee Stock Ownership and Profit Sharing*, THIRD WAY (Feb. 1, 2017), https://www.thirdway.org/report/having-a-stake-evidence-and-implications-for-broad-based-employee-stock-ownership-and-profit-sharing [perma.cc/B9T7-2V8K]; *see also* DOUGLAS L. KRUSE, RICHARD B. FREEMAN & JOSEPH R. BLASI, SHARED CAPITALISM AT WORK: EMPLOYEE OWNERSHIP, PROFIT AND GAIN SHARING, AND BROAD-BASED STOCK OPTIONS 257–89 (2010).

[43] In order to attract labor to Silicon Valley, startups used stock option plans. *See* William Lazonick, *The Financialization of the U.S. Corporation: What Has Been Lost, and How It Can Be Regained*, 36 SEATTLE U.L. REV. 857, 865 (2013); *see also* WILLIAM LAZONICK, SUSTAINABLE PROSPERITY IN THE NEW ECONOMY? BUSINESS ORGANIZATIONS AND HIGH-TECH EMPLOYMENT IN THE UNITED STATES 51–56 (2009) (discussing Cisco as an example of a company that attracted employees with stock options).

[44] *See* Lazonick, *supra* note 43, at 874–75.

[45] *See* Saul Levmore, *Puzzling Stock Options and Compensation Norms*, 149 U. PA. L. REV. 1901, 1901 (2001) ("These options could take many forms, but there is remarkable conformity in the practice of giving a class of employees a large percentage of compensation (in expected value terms) in the form of options[.]"); *see also* Smith, *supra* note 14 (discussing at-will contracts and equity compensation).

[46] *See* CONSTANCE E. BAGLEY & DIANE W. SAVAGE, MANAGERS AND THE LEGAL ENVIRONMENT: STRATEGIES FOR THE 21ST CENTURY 519 (2010).

[47] *See* LARS OLA BENGTSSON, REPEATED RELATIONSHIPS BETWEEN VENTURE CAPITALISTS AND ENTREPRENEURS 3 (2006) (examining data on 1500 serial entrepreneurs and finding that a failed entrepreneur is twice as likely to repeat VC relationships). Various studies show that approximately eighty to ninety percent of entrepreneurial firms that are unable to get

technology, research, and development needs, such firms commonly raise capital to fund the acquisition and development of essential intangible assets.[48]

The financing of young startup firms presents challenges to prospective investors and innovators. These challenges result from information barriers that are associated with investing in such firms. They result from uncertainty,[49]

venture capital backing fail within five to seven years of formation. *See* U.S. GEN. ACCOUNTING OFFICE, GAO/GGD-00-190, SMALL BUSINESS: EFFORTS TO FACILITATE EQUITY CAPITAL FORMATION 19 (2000) [hereinafter GAO REPORT] (approximately eighty percent of new businesses fail or no longer exist within five to seven years of formation).

48 If a startup cannot raise capital to support its growth, it will probably have to go through a bankruptcy process. Bankruptcy is often the result of a financing and information gap, which is termed in Silicon Valley the "Valley of Death." *See* Josh Lerner & Paul A. Gompers, *The Money of Invention: How Venture Capital Creates New Wealth,* UBIQUITY (Jan. 2002), http://ubiquity.acm.org/article.cfm?id=763904 [perma.cc/CX5Z-4A4V]; *see also* PHILLIP E. AUERSWALD, LEWIS M. BRANSCOMB, NICHOLAS DEMOS & BRIAN K. MIN, NAT'L INST. OF STANDARDS & TECH., NIST GCR 02-841A, UNDERSTANDING PRIVATE-SECTOR DECISION MAKING FOR EARLY-STAGE TECHNOLOGY DEVELOPMENT 35–38 (2005), https://www.nist.gov/sites/default/files/documents/2017/05/09/gcr02-841a.pdf [perma.cc/6LBZ-4UFX]; LEWIS M. BRANSCOMB & PHILLIP E. AUERSWALD, NAT'L INST. OF STANDARDS & TECH., NIST GCR 02-841, BETWEEN INVENTION AND INNOVATION: AN ANALYSIS OF FUNDING FOR EARLY-STAGE TECHNOLOGY DEVELOPMENT 35–38 (2002), https://www.nist.gov/sites/default/files/documents/2017/05/09/gcr02-841.pdf [perma.cc/NW5F-RRWJ]; George S. Ford, Thomas M. Koutsky & Lawrence J. Spiwak, *An Economic Investigation of the Valley of Death in the Innovation Sequence* 3–6 (Phoenix Ctr. for Advanced Legal & Econ. Pub. Policy Studies, Discussion Paper, 2007), http://www.osec.doc.gov/ReportValley%20of%20Death%20Funding%20Gap.pdf [perma.cc/K4BB-4LFU];. Additionally, the more outside capital needed, the greater the dilution of the founders' interests. *See* CONSTANCE E. BAGLEY & CRAIG E. DAUCHY, THE ENTREPRENEUR'S GUIDE TO LAW AND STRATEGY (5th ed. 2018).

49 *See* PAUL GOMPERS & JOSH LERNER, THE VENTURE CAPITAL CYCLE 157 (2d ed. 2004) (discussing how entrepreneurs and budding companies, by their very nature, are associated with considerable levels of uncertainty).

information asymmetry,[50] and agency problems,[51] all of which contribute to "adverse selection," where investors have difficulty screening and selecting entrepreneurs.[52] Moreover, the markets for allocating risk capital to startups are inefficient,[53] and until recently precluded non-VC investors from backing such firms.[54]

This Article focuses on VC-backed startups in the United States. Traditional VC investors, who invest in the first significant round of financing, typically acquire up to forty to sixty percent of a given startup, in the form of preferred stock with specified rights and preferences.[55] VCs also generally require that startups reserve about ten to twenty percent of equity for key hires and rank-and-file employees.[56]

VCs are sophisticated equity capital investors[57] (so-called "smart money"), and they almost always require tech company

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[50] *See id.* at 158; Laura Lindsey, *Blurring Firm Boundaries: The Role of Venture Capital in Strategic Alliances*, 63 J. FIN. 1137, 1154 (2008).

[51] *See* Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure,* 3 J. FIN. ECON. 305, 309 (1976) ("The problem of inducing an 'agent' to behave as if he were maximizing the 'principal's' welfare is quite general.").

[52] *See generally* George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970) (discussing the "adverse selection" problem and focusing on the lemons problem); *see also* Manuel A. Utset, *Reciprocal Fairness, Strategic Behavior & Venture Survival: A Theory of Venture Capital Financed Firms*, 2002 WIS. L. REV. 45, 56 (2002).

[53] *See* Utset, *supra* note 52, at 54–56.

[54] *See* BRANSCOMB & AUERSWALD, *supra* note 48, at 35–38.

[55] *See* BAGLEY & SAVAGE, *supra* note 46, at 519; *see also* BAGLEY & DAUCHY, *supra* note 48, at 79.

[56] *See* BAGLEY & SAVAGE, *supra* note 46, at 519; *see also* BAGLEY & DAUCHY, *supra* note 48, at 79.

[57] VCs are "highly specialized financial intermediaries." YINGLAN TAN, THE WAY OF THE VC: HAVING TOP VENTURE CAPITALISTS ON YOUR BOARD 244 (2010). They offer "optimal services" to an entrepreneurial firm that is positioned within the fund's concentrated industry, which is usually very narrowly defined. *See* Erica Gorga & Michael Halberstam, *Knowledge Inputs, Legal Institutions and Firm Structure: Towards A Knowledge-Based Theory of the Firm*, 101 NW. U. L. REV. 1123 (2007); *see also* Bengtsson, *supra* note 47. Professional VC funds also face information asymmetry

management to issue options to employees, both because they incentivize the labor force to maximize their efforts and because they mitigate the problems of asymmetric information.[58]

Options help screen prospective employees to find those who are committed and willing to tie their fate with that of the company.[59] The presumption is that the employees are only willing to take that risk if they believe in the future success of the business, which can contribute to the firm's growth.[60]

This Article next briefly describes the process of issuing equity compensation to employees. It then discusses the corporate governance structure of VC-backed startups, explaining the pattern and purpose behind the widespread use of preferred stock by VCs.

A. Standard Stock Option Plans

Employee stock options are very popular among growth companies in the United States—so much so that most high-tech startups, including Google, Intel, and Microsoft, use

issues. Accordingly, only ten percent of venture capitalists make their expected rate of return. GAO REPORT, *supra* note 47, at 19; *see also* Amy E. Knaup, *Survival and Longevity in the Business Employment Dynamics Data*, MONTHLY LAB. REV., May 2005, 50, 51 (stating that thirty-four percent of new businesses fail within their first two years and fifty-six percent fail within four years).

58 *See* Gorga & Halberstam, *supra* note 57; *see also* JAMES V. DELONG, COMPETITIVE ENTER. INST., THE STOCK OPTIONS CONTROVERSY AND THE NEW ECONOMY 8 (2002), https://cei.org/sites/default/files/James%20DeLong%20-%20The%20Stock%20Options%20Controversy%20And%20The%20New%20Economy.pdf [perma.cc/GY9Q-XJFT].

59 *See* DELONG, *supra* note 58, at 7–8.

60 *See id.* at 8 n.15 ("This point is different from the argument that stock options keep individual incentives aligned with the corporate good. The point here is that in the context of technical products and uncertainty, a process that pre-selects employees for belief is a good thing for the financiers."); Edward P. Lazear, *Output-Based Pay: Incentives or Sorting?* 4 (Nat'l Bureau of Econ. Research, Working Paper No. 7419, 1999), https://www.nber.org/papers/w7419.pdf [perma.cc/Z4Z7-QZX6].

equity compensation to build their companies.[61] Stock option plans are contracts between the company and its employees. These contracts are designed to attract, engage, and retain employees,[62] by encouraging them to share in the ownership of their firm (while the company preserves its cash).[63]

The idea that employees should share in the ownership of their firm is not a new one, and indeed has a strong history in American entrepreneurship.[64] Tying a worker's pay to company performance can make the worker better off or worse off, depending on the balance between risk and reward, contractual design, and market conditions. During the 1990s, the media publicized the success stories of Silicon Valley high tech employees who were fortunate enough to become millionaires overnight following a successful IPO.[65] By contrast, during the early 2000s the media covered horror stories about large public companies, such as Enron, that engaged in rampant fraud and caused their employees to lose most of their retirement savings, which was invested in company stock or tied to company performance.[66]

Today, the media covers stories on employees who work for unicorn firms and end up in debt when they take on loans to exercise their stock options and pay any related taxes.[67] Moreover, as noted above, unicorn firms and VCs in Silicon Valley are publicly debating whether the use of "golden

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[61] Blasi et al., *supra* note 42.

[62] *See* Gorga & Halberstam, *supra* note 57, at 1185 ("Stock options are a crucial tool for startups in the high-tech industry to retain knowledgeable employees.").

[63] However, there is no consensus as to which of the designs achieves these results. *See* BAGLEY & SAVAGE, *supra* note 46, at 519.

[64] The United States has a long history of promoting broad-based private property ownership. *See* Blasi et al., *supra* note 42.

[65] High tech employees usually get stock options. *See* Blasi et al., *supra* note 42*; see also* KRUSE ET AL., supra note 42, at 257–89.

[66] Enron's employee 401(k) plan was heavily invested in its stock. *See* Blasi et al., *supra* note 42.

[67] *See, e.g.*, Matt Levine, Opinion, *Work for Uber, Wind Up in Debt*, BLOOMBERG (Dec. 13, 2017), https://www.bloomberg.com/view/articles/2017-12-13/work-for-uber-wind-up-in-debt [perma.cc/5LQY-AKXP].

handcuffs" is fair due to "lock-in" and illiquidity of unicorn shares.[68] The problem with using stock option contracts to attract, engage and retain unicorn employees is that it is difficult to create a liquid market for unicorn shares. Unicorns are large privately held firms whose founders often do not want to go public or be sold. As a result, traditional stock option contracts may be ill-suited for employees at these companies.

1. Standard Stock Option Process and Contract

Stock option plans are contracts between a company and its employees (or its directors and advisors).[69] The stock option contract gives the optionee (the holder who is granted the option), the right to buy a certain number of shares at a strike price (or exercise price), which is typically fixed at fair market value of the options at the time of grant.[70] The option may be exercised for the exercise period, which is a fixed number of years, typically ten.[71]

The stock option contract is designed as a long-term contract with a perpetual pipeline of unvested options to prevent employees from leaving the company.[72] The company imposes vesting restrictions,[73] which limit the employees' ability to exercise the options for a stated period of time, usually four years.[74] The employees must be employed by the company during this period. A common vesting schedule is

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68 *See infra* Section III.C.

69 *See* Levmore, *supra* note 45, at 1901; *see also* Smith, *supra* note 14, at 580.

70 *See* BAGLEY & SAVAGE, *supra* note 46, at 519.

71 *See id.*

72 *See* Lazonick, *supra* note 43, at 865 ("So that stock options would perform a retention function as well as an attraction function, the practice evolved in New Economy firms of making option grants annually, with the vesting period for any annual block of option grants being 25% of the grants at the end of each of the first four years after the grant date.").

73 *Id.*

74 *See* BAGLEY & SAVAGE, *supra* note 46, at 519; *see also* Smith, *supra* note 14, at 586.

called "cliff vesting," whereby one-fourth of the options vest at the end of the first year, with the balance becoming exercisable on a monthly basis, over the next three years.[75]

The option is valuable if the contract is designed for a long period until expiration.[76] As long as the employee continued to work for the company, she would typically have up to ten years to exercise the options from the grant date.[77] If, however, the employee left the firm, the option agreement would typically give the employee only ninety days to exercise any vested options, a practice called "golden handcuffs."[78]

Employees benefit from vested options if their company goes public, as they are able to sell the stock and realize the upside value that they helped create.[79] But today many unicorn companies remain private, while their employees must pay large sums of money out-of-pocket for the exercise

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[75] *See infra* Part III; *see also* Lazonick, *supra* note 43, at 865.

[76] According to the Black-Scholes option pricing model, an option is more valuable the longer the period until expiration. *See* Fischer Black & Myron Scholes, *The Pricing of Options and Corporate Liabilities*, 81 J. POL. ECON. 637, 638 (1973).

[77] *See* Lazonick, *supra* note 43, at 865. This practice derives from Section 422(b) of the Internal Revenue Code, which provides that an "incentive stock option" must not be "exercisable after the expiration of 10 years" from the grant date. I.R.C. § 422 (West 2017).

[78] *See, e.g.*, Connie Loizos, *Handcuffed to Uber*, TECHCRUNCH (Apr. 29, 2016), https://techcrunch.com/2016/04/29/handcuffed-to-uber/ [perma.cc/WRW7-X48L].

[79] *See* BAGLEY & SAVAGE, *supra* note 46, at 347.

price and taxes[80] on profit that may never materialize.[81] As a result, the value of equity options to employees is diminished—helping to explain why unicorn firms are experiencing difficulties with attracting, engaging and retaining talent.[82]

In general, unicorn employees hope that the company will go public and that the shares will be traded at a price higher than the exercise price. In the event of a sale of the company, employees can exercise the vested options prior to the sale. After doing so, they will either be able to sell their shares or their options will be canceled in exchange for a payment equal to the spread between the exercise price and the sale price.[83]

[80] Federal and state taxes are imposed on exercise of equity options, even when there is no active market to sell them and such a market might never materialize. *See* Lieberman, *supra* note 32; *see also New Tax Act Provides Tax Deferral Opportunity for Private Company Equity Compensation Awards*, DAVIS POLK & WARDWELL LLP (Jan. 8, 2018) [hereinafter *New Tax Act*], https://www.davispolk.com/files/2018-01-08_tax_act_provides_deferral_opportunity_private_company_equity_compensation_awards.pdf [perma.cc/378N-FK2V] ("This potential disconnect has grown more prevalent in recent years as many tech companies have deferred their initial public offerings, frustrating the ability of employees to receive the benefit of equity awards without paying taxes out of pocket."); Kathleen Pender, *Bills Would Ease Tax Burden of Private-Company Stock Options*, S.F. CHRON. (Aug. 17, 2016), https://www.sfchronicle.com/business/networth/article/Bills-would-ease-tax-burden-of-private-company-9157182.php [perma.cc/7GDT-JMTY]; *Tax "Reform" and Its Impact On Stock Compensation*, MYSTOCKOPTIONS.COMBLOG (Dec. 20, 2017), http://mystockoptions.typepad.com/blog/2017/12/tax-reform-and-its-impact-on-stock-compensation.html [perma.cc/2RSG-FFZ4].

[81] This can also lead to a cash-flow issue for the unicorn firm. The firm is required to withhold and remit income and employment taxes at the time of the exercise (for NSOs) or vesting (for RSUs), but it is not transferring any cash to the grantee from which it can withhold those amounts. *See* Scott Belsky, *Don't Get Trampled: The Puzzle for "Unicorn" Employees*, MEDIUM (Jan. 2, 2017), https://medium.com/positiveslope/dont-get-trampled-the-puzzle-for-unicorn-employees-8f00f33c784f [perma.cc/76C3-E9CE]

[82] *See* Andrew Ross Sorkin, *How Valuable Is a Unicorn? Maybe Not as Much as It Claims to Be*, N.Y. TIMES (Oct. 16, 2017), https://nyti.ms/2yvpuyk [perma.cc/4Y7C-3KAA].

[83] *See* Ilona Babenko, Fangfang Du & Yuri Tserlukevich, *Will I Get Paid? Employee Stock Options and Mergers and Acquisitions* 1 (European

2. ISOs vs. NSOs

There are two types of stock options, incentive stock options ("ISOs")[84] and nonstatutory stock options (NSOs),[85] which are treated differently for the purpose of federal income tax. ISOs are granted only to employees. Employees can only take advantage of the beneficial tax treatment afforded to ISOs when certain requirements are met. First, the option's exercise price, or the price per share at which the option can be purchased, cannot be less than the fair market value on the date of the grant.[86] Second, employees cannot transfer ISOs to others, except on death. Third, the company's board of directors and shareholders must approve the written plan to grant ISOs. Fourth, as noted above, the employee must exercise the ISOs within the earlier of ten years from the grant date or ninety days of termination of employment.[87] Fifth, employees may not exercise more than a $100,000 value of ISOs in any one calendar year, as determined at the time of grant. Finally, there is a holding requirement: employees must hold the shares for at least two years after the grant date and one year after the exercise date.

If all the conditions are met, then the employee will not have any tax consequences at the time of grant or when the options are exercised.[88] After a disposition (such as a sale) of

Corp. Governance Inst. Working Paper No. 486/2016, 2017) ("In 79.9% of all completed M&A deals, some of the target's outstanding employee stock options are terminated by the acquirer. . . . Further, employees are often forced to accept the intrinsic value of their vested in-the-money stock options in lieu of the Black-Scholes value[.]")

[84] ISOs are mainly used by private companies. *See* BAGLEY & SAVAGE, *supra* note 46, at 521.

[85] *Id.*

[86] If the employee is a stockholder of ten percent or more in the company, then the exercise price must be equal to one hundred ten percent of the fair market value of the underlying security on the date of grant.

[87] If the employee is a stockholder of ten percent or more in the company, then it is five years from the date of grant. The ninety-day period can be extended if the termination is due to disability or death.

[88] NSOs do not have tax consequences at the time of grant (unless options are granted below fair market value).

the stock acquired upon exercise of the options, any gain or loss is treated as a long-term capital gain or loss. The employer has no withholding at exercise and no deduction.[89] If the holding requirements are not met, then the disposition is disqualified, and the ISOs are taxed as NSOs. Also, the alternative minimum tax may be tax payable upon the exercise of even ISOs.[90]

NSOs have fewer restrictions and are not limited to employees.[91] In practice, NSO plans are usually written with a requirement that the exercise price cannot be less than the fair market value on the date of the grant, because section 409A of the Internal Revenue Code regulates nonqualified deferred compensation paid by a service recipient to a service provider by generally imposing a twenty percent excise tax when certain design or operational rules contained in the section are violated.[92] The NSOs holder will be taxed at the time of exercise but not at the time of grant.[93] The difference between the value of the underlying security at the time of exercise of the NSOs and the exercise price of the NSOs is taxed as ordinary income.[94] If the holder of the NSOs is an employee, the taxable amount is subject to withholding and employment taxes.[95] After a sale, there are different tax treatments of the gain or loss depending on the holding period.[96] If the underlying securities are held for one year or less after exercise, then the income is taxed as a short-term

[89] With NSOs, there is a deduction on the spread (the excess of the fair market value of the stock at the date of exercise over the exercise period) at exercise.

[90] *See* BAGLEY & SAVAGE, *supra* note 46, at 521.

[91] *See* I.R.C. § 409A (2012).

[92] *Id.* Noncompliance with section 409A of the Internal Revenue Code can result in adverse tax consequences to the holder of the NSOs (and the company). *See id.*

[93] *Id.*

[94] *Id.*

[95] *Id.*

[96] *Id.*

capital gain or loss.[97] If they are held for more than one year, then the tax treatment is for long-term capital gains.[98]

As noted above, stock option plans were designed to retain talent and prevent "leakage from firm knowledge resources to other competitors."[99] According to Gorga and Halberstam, startup firms wanted to avoid the high costs associated with employee turnover and prevent the negative effect that high employee turnover has on company morale.[100]

According to labor market analysis, when employees receive specialized training they become very valuable to the firm and turnover becomes very costly.[101] Similarly qualified—but inexperienced—replacements require costly training to attain the proficiency of highly-trained employees. Therefore, these contracts were designed as long-term contracts to minimize departure.[102]

B. Traditional Governance Structure of VC-Backed Startups

While startups preferred equity payment plans for retention and cash-flow purposes, the favorable tax treatments for ISOs and NSOs made them appealing to employees as well. However, changes to the traditional governance structure of VC-backed firms caused a shift in employee expectation that created a labor contracting

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97 *Id.*

98 *Id.*

99 Gorga & Halberstam, *supra* note 57, at 1125 ("[T]he adoption of stock option plans in high-tech firms controls knowledge hazards[.]").

100 *Id.*

101 *See generally* Edward B. Rock & Michael L. Wachter, *Tailored Claims and Governance: The Fit Between Employees and Shareholders*, *in* EMPLOYEES AND CORPORATE GOVERNANCE (Margaret M. Blair & Mark J. Roe eds., 1999); Edward B. Rock & Michael L. Wachter, *Islands of Conscious Power: Law, Norms, and the Self-Governing Corporation*, 149 U. PENN. L. REV. 1619 (2001).

102 *See generally* Oliver E. Williamson, Michael L. Wachter & Jeffrey E. Harris, *Understanding the Employment Relation: The Analysis of Idiosyncratic Exchange*, 6 BELL J. ECON. 250 (1975).

problem that will be discussed later.[103] To understand these changes, though, it is important to first review the traditional governance structures of VC-backed startups.

Entrepreneurial high-growth and high-technology firms ("startups") are an important source of new experimentation and ideas, which would otherwise remain untapped in the economy.[104] Young (both large and small) startups play an important role in creating jobs, generating technological innovation and stimulating the U.S. economy.[105] However, many venture capital firms are concerned about the unicorn phenomenon and its adverse effect on the traditional startup funding model.[106]

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103 *See infra* Part III.C.

104 For a detailed explanation on how ideas promote growth, see generally Charles I. Jones, *Growth and Ideas*, *in* 1B HANDBOOK OF ECONOMIC GROWTH 1063 (Philippe Aghion & Steven N. Durlauf eds., 2005).

105 Empirical evidence tying startups to job creation began developing in the late 1970s and continued to grow through the 1980s. *See, e.g.*, David L. Birch, *Who Creates Jobs?*, 65 PUB. INT. 3 (1981), http://www.nationalaffairs.com/public_interest/detail/who-creates-jobs [https://perma.cc/4SFS-H84X]; *see also* ZOLTAN J. ACS & DAVID B. AUDRETSCH, INNOVATION AND SMALL FIRMS (1990) (establishing the greater weight of small firms in contributing to the U.S. economy and in generating technological innovations relative to large firms); ROBERT JAY DILGER, CONG. RESEARCH SERV., R41523, SMALL BUSINESS ADMINISTRATION AND JOB CREATION (2018), https://fas.org/sgp/crs/misc/R41523.pdf [https://perma.cc/V4A5-MZ68]; Zoltan J. Acs & David B. Audretsch, *Innovation in Large and Small Firms: An Empirical Analysis*, 78 AM. ECON. REV. 678 (1988). Entrepreneurship is considered to be an important mechanism for economic development through employment, innovation and welfare effects. *See generally* WILLIAM J. BAUMOL, THE FREE-MARKET INNOVATION MACHINE (2002); JOSEPH A. SCHUMPETER, THE THEORY OF ECONOMIC DEVELOPMENT (1934); Acs & Audretsch, *supra*; Sander Wennekers & Roy Thurik, *Linking Entrepreneurship and Economic Growth*, 13 SMALL BUS. ECON. 27 (1999).

106 *See* PITCHBOOK, *supra* note 9, at 3 ("Many venerable VCs view the unicorn phenomenon with scorn, operating under the assumption that billion-dollar valuations are a distraction—and potentially a detriment—to the traditional startup funding model.").

1. Traditional Pattern of VC Preferred Stock

The typical U.S. VC-backed start-up has two classes of stock: common and preferred, which can include multiple series. Startups usually issue preferred stock to VCs[107] and do so after each new round of financing.[108] In contrast, founders, employees, angels, and other early investors receive common stock.[109]

Preferred stock grants its holders priority over common stock in the event of sale or liquidation and in the payment of dividends.[110] If the firm is sold or dissolves, then the VCs will receive an amount equal to their liquidation preference before the common shareholders (the founders, employees, and angel investors) receive anything.[111] This is one of the reasons for

[107] VCs traditionally invest in startups using convertible preferred stock. *See* Steven N. Kaplan & Per Strömberg, *Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts*, 70 REV. ECON. STUD. 281 (2003); *see also* William A. Sahlman, *The Structure and Governance of Venture Capital Organizations*, 27 J. FIN. ECON. 473 (1990).

[108] *See* Jesse M. Fried & Mira Ganor, *Agency Costs of Venture Capitalist Control in Startups*, 81 N.Y.U. L. REV. 967, 981–82 (2006).

[109] *See id.* at 981.

[110] For more on the exit strategy of VCs, see D. Gordon Smith, *The Exit Structure of Venture Capital*, 53 UCLA L. REV. 315, 316 (2005) ("Before venture capitalists invest, they plan for exit."). For helpful background on the distinction between cash-flow and control rights, see generally Zohar Goshen & Richard Squire, *Principal Costs: A New Theory for Corporate Law and Governance*, 117 COLUM. L. REV. 767, 784–85 (2017); *see also* William W. Bratton & Michael L. Wachter, *A Theory of Preferred Stock*, 161 U. PA. L. REV. 1815, 1875 (2013) ("Venture capitalists holding preferred sometimes take voting control and can dominate the boards of directors even when holding a minority of the votes."); Fried & Ganor, *supra* note 108, at 981; Utset, *supra* note 52, at 61 ("Venture capitalists in most instances negotiate to get outright control of the board.").

[111] Sometimes in a subsequent round of financing, liquidation preferences from early rounds are waived or reduced, "to eliminate debt overhang." Broughman & Fried, *supra* note 20, at 391 n.6. Alternatively, a VC can be forced to convert to common and give up its preferences, if there is a pay-to-play contractual provision and it fails to participate. *See id.* at 391 n.6.

recent controversial lawsuits; common stock holders, such as mutual funds, sue for breach of fiduciary duty after they do not get anything from the sale of the company.[112]

If the firm conducts an IPO[113] (or is sold for a very high price), then the amount a VC could receive as a common stockholder may exceed its liquidation preference. In this case, a VC will convert its preferred stock to common at a pre-defined ratio.[114] As noted, most employees dream of an IPO, but the most common form of VC exit is a sale.[115]

In order to gain from their investment and provide liquidity for the investors in their fund, VCs will look for a

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112 *See, e.g.*, *In re* Trados Inc. S'holder. Litig., 73 A.3d 17 (Del. Ch. 2013) (involving claims against the board of a startup that was sold in a merger transaction). For an example of a subsequent court attempting to interpret *Trados*'s holding on the mechanics of fairness review, see *In re* Nine Systems Corp. S'holders. Litig., Consol. C.A. No. 3940-VCN, 2014 WL 4383127 (Del. Ch. 2014); *see also* Bratton & Wachter, *supra* note 110; Abraham J.B. Cable, *Opportunity-Cost Conflicts in Corporate Law*, 66 CASE W. RES. L. REV. 51, 75–76 (2015); Adam M. Katz, Comment, *Addressing the Harm to Common Stockholders in* Trados *and* Nine Systems, 118 COLUM. L. REV. ONLINE 234 (2018).

113 Many have written on VCs exit at IPO. *See, e.g.*, Christopher B. Barry, Chris J. Muscarella, John W. Peavy III & Michael R. Vetsuypens, *The Role of Venture Capital in the Creation of Public Companies: Evidence from the Going-Public Process*, 27 J. FIN. ECON. 447 (1990); Paul A. Gompers, *Grandstanding in the Venture Capital Industry*, 42 J. FIN. ECON. 133 (1996); Peggy M. Lee & Sunil Wahal, *Grandstanding, Certification, and the Underpricing of Venture Capital Backed IPOs*, 73 J. FIN. ECON. 375 (2004); William L. Megginson & Kathleen A. Weiss, *Venture Capitalist Certification in Initial Public Offerings*, 46 J. FIN. 879 (1991).

114 *See* Broughman & Fried, *supra* note 20 (contributed to the literature on VC exit via private sale and found that renegotiation is more likely when governance arrangements, including the firm's choice of corporate law, give common shareholders the power to impede the sale); Thomas Hellmann, *IPOs, Acquisitions and the Use of Convertible Securities in Venture Capital*, 81 J. FIN. ECON. 649 (2006).

115 *See* Broughman & Fried, *supra* note 20, at 385 (noting that the most common VC exit is private sale). Broughman and Fried suggest that, "when exiting through a sale, VCs generally have sufficient control to realize their full cash flow rights. However, VCs sometimes need to pay common shareholders to obtain their support for the proposed sale, and the likelihood of such renegotiation is higher when VCs have less control." *Id.*

quick exit. VCs have a bias towards early liquidity events, even if "the expected value of remaining an independent private company is higher."[116]

The preferred stock is therefore used as a signaling tool to VCs that the entrepreneur believes in the worth of the startup.[117] By demanding preferred stock, the VCs make sure that the entrepreneur will not profit from the startup until the proceeds from an IPO or sale are greater than the VC's liquidation preference.[118]

Therefore, the typical start-up lifecycle pattern proceeds as follows. The founders, backed by early equity capital providers, hire employees (the factors of production)[119] and offer them equity incentives. Employees who are willing to take a risk with the start-up accept a lower salary and a substantial stock option grant (or other equity incentive plan).[120] Finally, VC investors will look for an exit opportunity. As noted, there are three exit possibilities.

First, the board of directors (usually controlled by the VCs) can choose to go public through an IPO.[121] Following the IPO,

[116] *See* Fried & Ganor, *supra* note 108, at 994*; see also id.* at 995 ("Liquidity events promise a certain payout, much of which the preferred shareholders can capture through their liquidation preferences. Continuing to operate the firm as an independent company may expose the preferred-owning VCs to risk without sufficient opportunity for gain.").

[117] *See id.* at 994–95.

[118] *See id.* at 983 ("If the firm does poorly, the founder will therefore get less than her pro rata share of the firm's value, and nothing at all if the firm's value is less than the liquidation preference. If the firm does well, and the VCs convert into common, the founder receives her pro rata share of the firm's value. Thus, founders may have a greater incentive to increase startup value than they would under an all-common capital structure.").

[119] *See generally* Daniel M. Cable & Scott Shane, *A Prisoner's Dilemma Approach to Entrepreneur-Venture Capitalist Relationships*, 22 ACAD. MGMT. REV. 142 (1997); D. Gordon Smith, *Team Production in Venture Capital Investing*, 24 J. CORP. L. 949, 960 (1999).

[120] *See* Smith, *supra* note 14, at 595.

[121] For a discussion on the motives to go public, see Richard A. Booth, *The Limited Liability Company and the Search for a Bright Line Between Corporations and Partnerships*, 32 WAKE FOREST L. REV. 79, 89–92 (1997); *see also* James C. Brau & Stanley E. Fawcett, *Initial Public Offerings: An*

the founders are often replaced with professional managers, and the VC-controlled board is replaced with independent directors. The capital providers and employees are able to liquidate their investments in the firm.

Second, the board can decide to sell to another firm. In that case, the capital providers are able to cash out according to their preference, but the common shareholders, such as employees, often do not receive much of the profit from the sale, depending on the sale price. Indeed, their unexercised options may be cancelled without receiving anything in return, even for in-the-money options.[122]

Third, the start-up can be liquidated. As with a sale, VCs are able to cash out according to their liquidation preference, but again, the common shareholders, such as employees, are unlikely to receive much of the liquidation proceeds.

2. Mitigation of Asymmetric Information and Agency Costs

Venture capital firms are also able to use their preferred stock to mitigate agency costs and information asymmetry. In any startup, there is uncertainty concerning the success of the startup firm's product or service.[123] In turn, this affects the motivation of investors to advance capital and of suppliers to extend credit.

Startup firms traditionally experience difficulty raising capital from investors due to the uncertainty of success and

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Analysis of Theory and Practice, 61 J. FIN. 399 (2006) (discussing a survey on decisions to do an IPO).

[122] *See supra* note 121.

[123] *See* Anat Alon-Beck, *The Law of Social Entrepreneurship—Creating Shared Value Through the Lens of Sandra Day O'Connor's iCivics* 20 U. PA. J. BUS. L. 520, 536 (2018). ("[The] information asymmetry and uncertainty associated with agency issues contribute to 'adverse selection,' where impact investors have difficulty screening and selecting credible, high-quality entrepreneurs and companies, inhibiting investors' ability to make sound and competent investment decisions."). According to Jensen and Meckling's "agency theory," there is always uncertainty surrounding the agent's (or entrepreneur's) possible mismanagement and opportunistic conduct. *See generally* Jensen & Meckling, *supra* note 51.

the asymmetric information problem. As outsiders, prospective investors do not have the same knowledge about a firm's outlook as the entrepreneurs who work within the firm and are responsible for decision-making.

Investment in entrepreneurial firms is an investment in intangible assets, such as ideas, talents or trade secrets.[124] It is very hard to value the intangible assets involved. Further, in the event of default, intangible assets are worthless to investors.[125] Stock options are used as a signaling tool to the investors and outside market to help mitigate the information asymmetry problem. To reduce moral hazard employees and managers are given certain percentages in the company in the form of stock options, as part of their compensation package.

C. The Shift in Employee Expectations & Labor Contract Renegotiation

United States tech companies are engaged in a war for talent,[126] and unicorn firms in particular experience difficulty with attracting, engaging, and retaining talent.[127] The shift in employee expectations is evident from the frequent reissue or revision of equity grants and unicorn management's experimentation with alternative organizational strategies to try to provide liquidity opportunities to employees and early investors. As noted, due to these changes, unicorn employees now realize that although they are "rich on paper," they cannot liquidate and reap the benefits of their hard work.[128]

To illustrate, Uber,[129] the largest unicorn firm in the United States, has one of the highest turnover rates of

124 *See* Alon-Beck, *supra* note 123, at 536–37.

125 *See* Lindsey, *supra* note 50, at 1137; *see also* GOMPERS & LERNER, *supra* note 49, at 128 (discussing the nature of the entrepreneur's asset, which affect her firm's financial and corporate strategy).

126 *See* Elizabeth G. Chambers et al., *supra* note 16, at 46*; see also* Ovide, *supra* note 15.

127 *See* Efrati & Schultz, *supra* note 11.

128 *See infra* Section III.C.

129 Employees who joined Uber at its founding in 2009 are probably locked in due to its over-valuation. Though rich on paper, they cannot

knowledgeable employees[130] despite offering its talent, on average, the highest annual salary, including the highest equity award, among tech companies.[131] Software engineers at Uber are, on average, better compensated than those at Google,[132] Microsoft,[133] Amazon.com[134] and Apple.[135] Uber is not the only unicorn that experiences high turnover, but is leading "the race to the bottom, with 1.2 years of average employee tenure."[136]

Thanks to online data sites, such as Glassdoor and PaySa, as well as news sites like CNBC, there are many public reports about the fact that unicorn employees, especially Uber employees, complain about the extreme capital lock-in and illiquidity of their stock options.[137] On March 6, 2017, the Financial Times reported that Uber competitors have seen "an

liquidate. Additionally, if they joined in 2009, now, in 2019, their options will soon expire under the Tax Code, and the company cannot extend them. *See generally supra* notes 33–40.

130 According to *The Information*'s Average Software Engineer Compensation chart, Airbnb pays an average annual equity compensation of $158,000, and Uber pays an average annual equity compensation of $157,000. Efrati & Schultz, *supra* note 11.

131 According to *The Information*'s Average Software Engineer Compensation chart, Uber pays a software engineer, on average, an annual equity compensation of $157,000. In comparison, on average, Google pays $59,000, Microsoft pays $40,000, Amazon pays $33,000, and Apple pays $39,000. *Id.*

132 Google pays a software engineer an average base salary of $132,000, an average annual equity compensation of $59,000, an average annual bonus of $22,000, and an average signing bonus of $20,000 (total: $233,000). *Id.*

133 Microsoft pays an average base salary of $135,000, an average annual equity compensation of $40,000, an average annual bonus of $30,000, and an average signing bonus of $17,000 (total: $222,000). *Id.*

134 Amazon pays an average base salary of $121,000, an average annual equity compensation of $33,000, an average annual bonus of $19,000, and an average signing bonus of $30,000 (total: $203,000). *Id.*

135 Apple pays an average base salary of $127,000, an average annual equity compensation of $39,000, an average annual bonus of $20,000, and an average signing bonus of $22,000 total: $208,000). *Id.*

136 Paysa Team, *supra* note 40; *see also* Efrati & Schultz, *supra* note 11.

137 *See* Samuelson, *supra* note 28.

uptick in job applications from Uber employees, as its workers lose faith in the company's leadership and start to doubt the value of their stock options."[138] Uber is the largest technology firm in Silicon Valley[139] and historically, like many other California firms, has been able to retain its employees by offering them equity and stock options, thereby binding them with golden handcuffs.[140]

Unicorn firms are no longer as rare and are growing at a rapid pace around the world. The United States has the largest concentration of unicorns in the world[141] and around "$700 billion in unrealized value is currently locked up in unicorns."[142] In 2017 alone, "22% of the capital invested in the US was part of a deal valuing a company at $1 billion or more."[143]

138 Leslie Hook, *Uber Employees Lose Faith and Explore Exit*, FIN. TIMES (Mar. 6, 2017), https://www.ft.com/content/c6bc4b2c-0012-11e7-8d8e-a5e3738f9ae4 [https://perma.cc/3TCW-RE3M].

139 *See supra* note 33.

140 Merriam Webster defines "golden handcuffs" as "special benefits offered to an employee as an inducement to continue service," with the first known use by 1976. *Golden Handcuffs*, MERRIAM WEBSTER, https://www.merriam-webster.com/dictionary/golden%20handcuffs [https://perma.cc/69NF-L595]; *see also* Booth, *supra* note 21, at 271. For further accounts of Uber's use of golden handcuffs, see Dan Primack, *Uber Plays Hardball with Early Shareholders*, FORTUNE (June 20, 2014), http://fortune.com/2014/06/20/uber-plays-hardball-with-early-shareholders/ [https://perma.cc/7S5C-TYGE]; Dan Primack, *Early 'Unicorn' Employees Can't Always Cash In*, FORTUNE (Aug. 19, 2014), http://fortune.com/2014/08/19/early-unicorn-employees-cant-always-cash-in/ [https://perma.cc/4XPU-SWRE].

141 *See* PITCHBOOK, *supra* note 9 ("The aggregate valuation of unicorns stood at just $35 billion in 2009, but has grown more than 20x since."). For the latest list of unicorn companies, see *The Global Unicorn Club*, CB INSIGHTS, https://www.cbinsights.com/research-unicorn-companies [https://perma.cc/RL7L-W9RL].

142 PITCHBOOK, *supra* note 9.

143 *Id.*

These firms are growing "twice as fast as those founded a decade ago."[144] Due to this fast-paced growth, founders and managers of unicorn firms are dealing with critical problems of getting big fast.[145] One such problem associated with expanding from a small startup team to a large unicorn with thousands of employees is the fight to recruit, engage, and retain a motivated work force.[146] However, the unicorn firm's and its employees' short-term economic interests are in clear conflict.

First, unicorn employees now experience capital or "investor" lock-in.[147] Capital lock-in refers to when equity investors in a corporation are not able to withdraw or "redeem" the capital that they contributed.[148] They cannot force the corporation to distribute assets or buy back their shares.[149]

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[144] *How Unicorns Grow*, HARV. BUS. REV., Jan.–Feb. 2016, at 28, 28 ("Firms founded from 2012 to 2015 had a time to market cap more than twice that of firms founded from 2000 to 2003.").

[145] *See* Zach Cutler, *4 Big Challenges That Startups Face*, ENTREPRENEUR (Dec. 11, 2014), https://www.entrepreneur.com/article/240742 [https://perma.cc/UZ83-2LYU]. *See generally* Wickham Skinner, *Big Hat, No Cattle: Managing Human Resources*, HARV. BUS. REV., Sept.–Oct. 1981, at 106.

[146] Until employees exercise their options, they cannot vote on how the firm will operate, and many times, even after they exercise, their voting rights are marginal. Therefore, due to the large size of unicorn startups, stock-holding employees have no control over the company's strategy or senior managements' actions.

[147] *See* Darian M. Ibrahim, *The New Exit in Venture Capital*, 65 VAND. L. REV. 1, 7 (2012) (introducing the term "investor lock-in"). This lock-in effect is due to the fact that founders, senior management, and some investors are not in a rush to do an IPO. See Kupor, *supra* note 3, on the decline in IPOs.

[148] *See* Ibrahim, *supra* note 147, at 6–7; *see also* Margaret M. Blair, *Reforming Corporate Governance: What History Can Teach Us*, 1 BERKELEY BUS. L.J. 1, 26 (2004).

[149] *See* Ibrahim, *supra* note 147, at 6; *see also* Blair, *supra* note 148, at 14, 26 (citing early corporate charters and statutes that limited withdrawals to formal corporate dissolution).

Corporate law scholars have debated the desirability of this capital lock-in. Some scholars, such as Margaret Blair, maintain that capital lock-in is desirable because it assures firm stability, as investors do not have the power to withdraw their capital easily.[150] In contrast, scholars including Larry Ribstein and Darian Ibrahim maintain that capital lock-in raises agency costs, as investors do not have a way of disciplining the firm's managers by threatening to withdraw their capital from the firm,[151] which further contributes to governance problems within the firm.

Unicorn employees become common shareholders when they exercise their options. As common shareholders, they do not have downside protection. Therefore, their common shares will be last in line to be paid, even if there is a sale in the future.[152] The experience of Good Technology ("Good") employee compensation illustrates the problems that arise when this lack of downside protection is combined with the lock-in issues described above.[153]

Good was a unicorn startup that filed for an IPO in May 2014 but eventually postponed it and never completed the process.[154] In March 2015, Good's board of directors declined an acquisition offer for $825 million due to their desire to go public.[155] After running into financial distress, Good

150 *See* Blair, *supra* note 148, at 43. According to Blair, capital lock-in allows the firm to attract not only investors but also "skilled employees[.]" *Id.*

151 *See* Larry E. Ribstein, *Should History Lock in Lock-in?*, 41 TULSA L. REV. 523, 524–25 (2006); *see also* Ibrahim, *supra* note 147, at 6–7.

152 A sale of a startup is more likely to happen today than an IPO. *See 3 Data Points that Suggest the IPO Market May Never Come Back*, CB INSIGHTS (Jan. 2, 2019), https://www.cbinsights.com/research/tech-ipo-dead/ [https://perma.cc/3BM3-JVJ9] ("Despite regular yearnings for an IPO comeback, it might be time to accept that it's not going to happen.").

153 *See* Cable, *supra* note 5, at 614–16.

154 *See* Matt Levine, Opinion, *Good Technology Wasn't So Good for Employees*, BLOOMBERG (Dec. 23, 2015), https://www.bloomberg.com/opinion/articles/2015-12-23/good-technology-wasn-t-so-good-for-employees (on file with the *Columbia Business Law Review*).

155 *See id.*

ultimately sold for almost half this value, $425 million, in September 2015.[156] News of the sale came as a shock to Good's employees, who "discovered their Good stock was valued at 44 cents a share, down from $4.32 a year earlier."[157]

Good's preferred shareholders were able to recover their investment. However, Good's employees, who were common shareholders, "ended up paying to work" for Good.[158] Some employees had taken on loans to pay for the taxes to exercise their stock options, but never profited from that investment as the loan amounts were much larger than what their stock was worth after the sale.

It should be noted that, prior to the sale, Good allowed its employees to trade their stock on the secondary markets. Some of Good's employees did not use the secondary market as an exit vehicle, but instead purchased additional Good stock on these platforms as they believed in the company's success and in the board's desire to follow-through with an IPO. Good exhibits the risks caused by information asymmetry: employee-investors not only took on loans to exercise their options, but even bought additional shares on the secondary market because they believed in the company and had no idea about its financial distress.

This example illustrates how important IPOs are as an exit tool for unicorn employees. IPOs allow employees to start a new firm or join a new startup and relax the employees' financial constraints.[159] Unfortunately, as explained in Part III, there has been a steady decline in IPOs.

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156 *See id.*

157 *Id.*

158 *Id.*

159 *See* Tania Babina, Paige Ouimet & Rebecca Zarutskie, *Going Entrepreneurial? IPOs and New Firm Creation* (Div. of Research & Statistics and Monetary Affairs, Fed. Reserve Bd., Financial & Economic Discussion Series, No. 2017-022, 2017), https://ssrn.com/abstract=2940133 [https://perma.cc/AB6R-DMH8]. Babina et al.'s results suggest a new potential cost of IPOs that firms should factor into their IPO decision: losing entrepreneurial-minded employees.

III. PRIVATE MARKETS ARE THE NEW PUBLIC MARKETS

A variety of market conditions contribute to the rise in unicorn firms, which no longer follow the traditional trajectory of a high growth startup or grow as "incubators for tomorrow's publicly held corporations."[160] The corporate patterns and theories observed today are not merely products and consequences of technology or development narratives, but lie in politics and economic philosophy as well.[161]

Section III.A explains the decline of the U.S. public corporation and public markets and Section III.B presents some changes to legislation that facilitate the raising of private capital.

A. Decline in IPOs

Recently, there has been a sharp decline in IPOs in the United States, which makes "our public capital markets . . . less attractive to growing businesses than in the past," according to Jay Clayton, Chairman of the SEC.[162] Policymakers, regulators, investors, academics[163] and the

[160] Rock & Wachter, *supra* note 13, at 914.

[161] An examination of classic corporate governance theory demonstrates that "the public corporation is as much a political adaptation as an economic or technological necessity." Mark J. Roe, *A Political Theory of American Corporation Finance*, 91 COLUM. L. REV. 10, 10 (1991).

[162] Jay Clayton, *Testimony on "Oversight of the U.S. Securities and Exchange* Commission," SEC. & EXCHANGE COMMISSION (Sept. 26, 2017), https://www.sec.gov/news/testimony/testimony-clayton-2017-09-26#_ftn1 [https://perma.cc/6JDX-U9TK]

[163] There are many theories that try to explain the decline in IPOs. *See generally* Francesco Bova, Miguel Minutti-Meza, Gordon Richardson & Dushyantkumar Vyas, *The Sarbanes-Oxley Act and Exit Strategies of Private Firms*, 31 CONTEMP. ACCT. RES. 818 (2014); *see also* Renee M. Jones, Essay, *The Unicorn Governance Trap*, 166 U. PA. L. REV. ONLINE 165, 170 (2017) (showing that new regulations caused a corporate governance problem, by creating unicorns that are not subject to the oversight of the market or supervised by regular private company investors). Bova and others claim that the expense of regulatory compliance with the 2002 Sarbanes-Oxley Act ("SOX") is a factor in the decline of IPOs. *See* Sarbanes

press are concerned about the present decline.[164] To illustrate this decline, during the dot-com peak in 1996, more than 8000 domestic public companies were listed on a U.S. stock exchange.[165] The number was down to 3618 companies by the end of 2016.[166]

In the United States, the volume of IPOs is a measure of success of the innovation economy.[167] Innovation has a very

Oxley Act of 2002, Pub. L. 107-204, 116 Stat. 745 (2002). Compliance with the SOX requirements shifted the incentive for private firms. The new exit strategy of private firms is to be acquired by a public acquirer, as opposed to doing an IPO. *See* Bova et al., *supra*. On the other hand, the following scholars argue that SOX and other early-2000s regulatory changes are not the cause for the decline in small firm IPOs. *See* Doidge et al., *The U.S. Left Behind*, *supra* note 6, at 569; Doidge et al., *The U.S. Listing Gap*, *supra* note 6, at 486; Gao et al., *supra* note 6, at 1690; Paul Rose & Steven Davidoff Solomon, *Where Have All the IPOs Gone? The Hard Life of the Small IPO*, 6 HARV. BUS. L. REV. 83, 86–87 (2016).

164 *See* Frank Partnoy, *The Death of the IPO*, ATLANTIC (Nov. 2018), https://www.theatlantic.com/magazine/archive/2018/11/private-inequity/570808/ [https://perma.cc/BSY7-6N7M]; Steven Davidoff Solomon, *A Dearth of I.P.O.s, but It's Not the Fault of Red Tape*, N.Y. TIMES (Mar. 28, 2017), https://www.nytimes.com/2017/03/28/business/dealbook/fewer-ipos-regulation-stock-market.html [https://perma.cc/ABD6-FGCR].

165 *See* DAVID BROWN, JEFF GRABOW, CHRIS HOLMES & JACKIE KELLEY, ERNST & YOUNG LLP, LOOKING BEHIND THE DECLINING NUMBER OF PUBLIC COMPANIES: AN ANALYSIS OF TRENDS IN THE US CAPITAL MARKETS 2 (2017) [hereinafter EY REPORT], https://www.ey.com/Publication/vwLUAssets/an-analysis-of-trends-in-the-us-capital-markets/$FILE/ey-an-analysis-of-trends-in-the-us-capital-markets.pdf [https://perma.cc/9NF7-MDF6] ("US listings hit a record high of more than 8,000 domestically incorporated companies listed on a US stock exchange with an average market capitalization of $1.8b in today's dollars").

166 Doidge et al., *Eclipse of the Public Corporation*, *supra* note 6, at 8. This number decreased quickly through 2003, to 5295 domestic U.S.-listed companies. EY REPORT, *supra* note 165, at 2 ("The loss of domestic US-listed companies in 1996–2003 represents 74% of the loss from 1996 to date.").

167 Shai Bernstein, *Innovator's Dilemma: IPO or No?*, THIRD WAY.ORG (Aug. 22, 2017), https://www.thirdway.org/report/innovators-dilemma-ipo-or-no (on file with the *Columbia Business Law Review*); *see also* ANDREW METRICK & AYAKO YASUDA, VENTURE CAPITAL & THE FINANCE OF INNOVATION (2d ed. 2011); Craig Doidge et al., *Eclipse of the Public Corporation*, *supra* note 6; Xiaohui Gao, et al., *supra* note 6; Manju Puri & Rebecca Zarutskie,

important role in promoting growth, according to Solow's economic growth theory.[168] Solow postulated that technological innovation is the only reliable engine that can drive change and is the fundamental source of sustained productivity and growth.[169] Until recently, an IPO exit was believed to be the ultimate entrepreneur founder's dream and one of the greatest achievements in the lifecycle of a startup company. What changed?

During the IPO process the startup company transforms from a privately held corporation to one that is publicly traded on an exchange with dispersed ownership. This transformation allows a startup company to raise large amounts of capital from the public markets. A company's transition to public equity markets also may affect its ability to attract human capital.[170] After an IPO, the company will gain improved access to capital, and the use of stock options may enable firms to attract new human capital.[171]

As noted above, startup firms typically experience informational and financial barriers to raising capital.[172] This is especially true following a financial crisis. Such difficulties are the product of uncertainty, high risk, and information asymmetry problems, and in the past precluded non-VC investors from backing such firms.[173] Therefore, academic

On the Life Cycle Dynamics of Venture-Capital-and Non-Venture-Capital-Financed Firms, 67 J. FIN. 2247 (2012); Brian J. Broughman & Jesse M. Fried, *Do Founders Control Start-Up Firms That Go Public?* 3 (European Corp. Governance Inst. Working Paper, No. 405/2018, 2018).

168 *See* Robert M. Solow, *Growth Theory and After*, 78 AM. ECON. REV. 307, 309 (1988).

169 *See id.*

170 *See*, *e.g.*, Shai Bernstein, *Does Going Public Affect Innovation?*, 70 J. FIN. 1365, 1398 (2015).

171 However, retention of key employees (inventors) may become difficult as options are vested, ownership is diluted, and changes in firm governance affect employees. *See id.*

172 *See supra* Section II.B.2.

173 *See* BRANSCOMB & AUERSWALD, *supra* note 48, at 14–16.

literature has focused on VCs as an important source of financing startups over the last thirty years.[174]

Recently, however, there has been a dramatic increase in alternative financing vehicles, and new market trends have developed in conjunction with, and sometimes in response to, the difficulty of obtaining VC investments. New market participants such as mutual funds and sovereign wealth funds now invest large amounts of capital in unicorn firms.[175] This Article introduces these new players[176] and describes the market dynamics that contribute to the trend toward unicorn firms delaying their IPOs.[177]

There is a heated debate in Silicon Valley about whether the use of golden handcuffs is fair due to these new market dynamics.[178] Traditional stock option contracts were based on the principle that it will take a startup about four years to go public; however, startups today are staying private longer,

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174 *See* Paul Gompers, William Gornall, Steven N. Kaplan & Ilya A. Strebulaev, *How Do Venture Capitalists Make Decisions?* 2 (Nat'l Bureau of Econ. Research, Working Paper No. 22587, 2016).

175 *See* Sungjoung Kwon, Michelle Lowry & Yiming Qian, *Mutual Fund Investments in Private Firms* 1 (Sept. 20, 2018) (unpublished manuscript), https://ssrn.com/abstract=2941203 [perma.cc/B65L-4W4S].

176 Chernenko et al. show that:

> [O]ver the 2010–2016 period, the number of distinct funds directly investing in unicorns has increased from less than 10 to more than 140. . . . The dollar value of aggregate holdings has also increased by an order of magnitude, from less than $1 billion to more than $8 billion. These results paint a consistent picture of unicorn investments becoming a more important part of the portfolios of open-end mutual funds.

Chernenko et al., *supra* note 4, at 20; *see also* William Gornall & Ilya A. Strebulaev, *Squaring Venture Capital Valuations with Reality* 2 (Nat'l Bureau of Econ. Research, Working Paper No. 23895, 2017) ("A number of the largest U.S. mutual fund providers, such as Fidelity Investments and T. Rowe Price, have begun investing their assets directly in unicorns.").

177 Kwon et al., *supra* note 175, at 2. Kwon et al. further show that these large amounts of capital "should enable companies to stay private longer." *Id.* at 27.

178 *See infra* Part IV.

averaging about eleven years.[179] This delay causes lock-in and illiquidity for unicorn shares. Additionally, because unicorn valuations are very high prior to IPOs, options are often prohibitively expensive to exercise for some employees. Unicorns accordingly face pressure to seek alternative employee compensation mechanisms and contractual arrangements.[180]

Unicorn employees are faced with a dilemma—if their options are expiring (or if they leave the firm), they must choose between forfeiting their options and thereby reducing their chances of getting rich (thus forfeiting a significant portion of the compensation package to which they initially agreed), or exercising their options and paying taxes on profit that may never materialize.

As a result of this crisis, the National Venture Capital Association and Palantir Technologies lobbied Congress on both the House and Senate versions of the "Empowering Employees through Stock Ownership Act."[181] The purpose of the Act was to provide an extended deferral period and to ease the tax burden to employees.[182] The material portions of these bills are included in section 13603 of the new Tax Cuts and Jobs Act (the "Tax Act").[183] New section 83(i) of the Internal Revenue Code allows certain individuals to elect to defer for up to five years.[184] This legislation is part of a broader push

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[179] Gao et al., *supra* note 6; Doidge et al., *Eclipse of the Public Corporation*, *supra* note 6.

[180] *See supra* Section III.C.

[181] Francine McKenna, *Unicorn Lobby Pushes Back on Stock-Option Move in Republican Tax Bill*, MARKET WATCH (Nov. 13, 2017), https://www.marketwatch.com/story/unicorn-lobby-pushes-back-on-executive-compensation-move-in-republican-tax-bill-2017-11-13 [https://perma.cc/X943-9ZGC].

[182] *Id.*

[183] Tax Cuts and Jobs Act, Pub. L. No. 115-97 § 13603, 31 Stat. 2054, 2159–64 (2017).

[184] New Internal Revenue Code section 83(i) allows certain individuals to elect to defer recognizing income on qualified stock options and restricted stock units for up to five years. I.R.C. § 83(i) (West 2017). The new rule evolved from a 2016 Senate bill, sponsored by Senators Mark Warner and

by unicorns to encourage their employees to receive equity compensation.

Is the IPO market broken? Scholars such as Gao, Ritter, and Zhu, maintain that it is not.[185] On the contrary, despite fewer U.S. offerings today than in the mid-90s, average annual proceeds from U.S. IPOs have greatly increased.[186] Today's public companies not only raise more capital; they are also more stable, as evidenced by fewer de-listings.[187]

This Article does not take a stance on whether the IPO market is broken or not. Rather, building on the works of de Fontenay,[188] Fried and Broughman,[189] and Ewens and Farre-Mensa,[190] it adopts the view that there are multiple factors that contribute to the decline in IPOs. This Article instead focuses on the factors that contributed to the rise in unicorn startup firms, especially factors that influence founders' decisions to go public or continue to grow while staying private.[191]

Dean Heller, the Empowering Employees Through Stock Ownership Act, S. 3152, 114th Cong. (2016) and a companion House bill, H.R. 5719, 114th Cong. (2016). The purpose was to provide an extended deferral period of up to seven years for employees who exercise options to buy the stock of private companies to ease the tax burden arising from equity grants covering shares that are not publicly traded. *See* McKenna, *supra* note 181.

185 *See* Gao et al., *supra* note 6, at 1691.

186 EY REPORT, *supra* note 165, at 2.

187 *See id.*

188 *See* de Fontenay, *supra* note 3, at 448 ("[W]hile critics blame the increase in regulation for the decline of public equity, the ongoing deregulation of private capital raising arguably played the greater role.").

189 *See* Broughman & Fried, *supra* note 167, at 2. According to Broughman and Fried, Mark Zuckerberg is not the rule, but rather the exception. *Id.* at 1. They prove, contrary to traditional finance theory, especially Black & Gilson's "call option on control" theory linking VC and stock markets, that the "ex ante likelihood of founders reacquiring control at IPO is extremely low[.]" *Id.* at 2. They focus on control that is both strong (where "founders have enough voting power to ensure they remain in the saddle") and durable (control that lasts at least three years). *Id.* at 2, 6–7.

190 Ewens & Farre-Mensa, *supra* note 18, at 7.

191 Empirical evidence suggests that active markets actually have a negative effect on innovative investment strategies. *See* Daniel Ferreira,

B. New Equity Capital Providers

The institutional private market is robust and expanding, and "private markets are the new public markets," according to Matt Levine.[192] Unicorn firms now regularly raise substantial funding from investors who traditionally invested in public companies,[193] such as large U.S. mutual funds (e.g. Fidelity and T. Rowe Price)[194] and sovereign wealth funds from China, Kuwait, Saudi Arabia, and other countries.[195] Fidelity, for example, holds the second-highest number of unicorns in any portfolio.[196] Fidelity joins new and existing market players: VCs, private equity, angel investors,[197]

Gustavo Manso & André C. Silva, *Incentives to Innovate and the Decision to Go Public or Private*, 27 REV. FIN. STUD. 256, 256 (2014) ("[I]t is optimal to go public when exploiting existing ideas and optimal to go private when exploring new ideas."); *see also* Filippo Belloc, *Innovation in State-Owned Enterprises: Reconsidering the Conventional Wisdom*, 48 J. ECON. ISSUES 821, 827 (2014) ("[P]ublicly traded securities require disclosure of all the relevant information and their market prices quickly react to business successes and failures, thereby encouraging insiders to choose conventional projects.").

192 Matt Levine, Opinion, *Something Is Lost When Companies Stay Private*, BLOOMBERG (Apr. 4, 2018), https://www.bloomberg.com/opinion/articles/2018-04-04/something-is-lost-when-companies-stay-private (on file with the *Columbia Business Law Review*).

193 *See* Chernenko et al., *supra* note 4, at 2; *see also* Gornall & Strebulaev, *supra* note 176, at 2; Kwon et al., *supra* note 175, at 37.

194 Gornall & Strebulaev, *supra* note 176, at 2.

195 *See* PITCHBOOK, *supra* note 9, at 4–5.

196 *See id.*; *see also* Jeff Schwartz, *Should Mutual Funds Invest in Startups? A Case Study of Fidelity Magellan Fund's Investments in Unicorns (and Other Startups) and the Regulatory Implications*, 95 N.C. L. REV. 1341, 1343 (2017).

197 *See* MARK VAN OSNABRUGGE & ROBERT J. ROBINSON, ANGEL INVESTING: MATCHING STARTUP FUNDS WITH STARTUP COMPANIES 5 (2000); Darian M. Ibrahim, *Financing the Next Silicon Valley*, 87 WASH. U. L. REV. 717, 739 (2010) ("[I]nformal angel investing financed many of the foundational start-ups in Silicon Valley and Route 128.").

clusters of angel investors,[198] corporate venture capital,[199] crowdfunding platforms,[200] sovereign wealth funds, and other institutional investors, who are aggressively investing large amounts of capital in emerging growth companies.[201] In particular, mutual funds have significantly expanded their investments in unicorns since 2010.[202] Chernenko, Lerner, and Zeng show that "over the 2010–2016 period, the number of distinct funds directly investing in unicorns has increased

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[198] *See FAQs for Angels & Entrepreneurs*, ANGEL CAP. ASS'N, https://www.angelcapitalassociation.org/faqs/#What_are_angel_groups_ [https://perma.cc/RAG3-6RJW] ("Many angel groups co-invest with other angel groups, individual angels and early-stage venture capitalists to make investments of $500,000 to $2 million per round."); *see also* Benjamin Gomes-Casseres, *Alliances, Inter-firm*, ROUTLEDGE ENCYC. OF INT'L POL. ECON. 27 (R. J. Barry Jones ed., 2001) ("An 'inter-firm alliance' is an organizational structure established to govern an *incomplete contract* between *separate firms* and in which each firm has *limited control*."); Robert Pitofsky, *A Framework for Antitrust Analysis of Joint Ventures*, 54 ANTITRUST L.J. 893 (1985); T George Harris, *The Post-Capitalist Executive: An Interview with Peter F. Drucker*, HARV. BUS. REV., May–June 1993, at 114, 116 ("Today businesses grow through alliances, all kinds of dangerous liaisons and joint ventures, which, by the way, very few people understand."); Joseph A. McCahery & Erik P.M. Vermeulen, *Corporate Governance and Innovation: Venture Capital, Joint Ventures, and Family Businesses* (European Corp. Governance Inst., Working Paper No. 65/2006, 2006) (discussing corporate governance for joint ventures).

[199] *See* Ronald W. Masulis & Rajarishi Nahata, *Financial Contracting with Strategic Investors: Evidence from Corporate Venture Capital Backed IPOs*, 18 J. FIN. INTERMEDIATION 599, 627 (2009) ("[L]ead CVCs have lower board representation than lead traditional VCs, which is consistent with the entrepreneur's desire to limit CVC influence, particularly at the earliest stages of a start-up's life."); Henry W. Chesbrough, *Making Sense of Corporate Venture Capital*, HARV. BUS. REV., Mar. 2002, at 90, 92 ("[The] definition excludes investments made through an external fund managed by a third party, even if the investment vehicle is funded by and specifically designed to meet the objectives of a single investing company.").

[200] *See generally* Joan MacLeod Heminway, *Securities Crowdfunding and Investor Protection*, CESIFO DICE REP., Summer 2016, at 11, http://www.cesifo-group.de/DocDL/dice-report-2016-2-heminway-june.pdf [https://perma.cc/C3RV-D23F].

[201] *See* EY REPORT, *supra* note 165, at 8.

[202] Kwon et al., *supra* note 175, at 1.

from less than 10 to more than 140."[203] Kwon, Lowery, and Qian add that unicorn startups are now able to raise large amounts of capital from mutual funds, and this capital should enable the "companies to stay private longer."[204] Moreover, mutual funds currently hold more than $8 billion in unicorn firms, and this number is increasing.[205] Clearly, unicorn investments are "becoming a more important part of the portfolios of open-end mutual funds."[206]

The entrance of these new players changes the equilibrium, allowing founders to demand more founder-friendly rounds. Raising capital for a startup company—even if it is located in Silicon Valley and is backed by a VC—is an extremely risky and challenging endeavor.[207]

The investments of mutual funds thus enable unicorn founders to stay private longer, which founders prefer in order to maintain control over the firm and to continue investing in innovation. There is evidence that the social return on research and development (especially early stage technology development) is much higher than the private return on such

[203] Chernenko et al., *supra* note 4, at 20.

[204] Kwon et al., *supra* note 175, at 2.

[205] Chernenko et al., *supra* note 4, at 20 ("The dollar value of aggregate holdings has also increased by an order of magnitude, from less than $1 billion to more than $8 billion."); *see also* Gornall & Strabulaev, *supra* note 176, at 2 ("While the total present VC exposure of mutual funds, at around $7 billion, is small compared to the size of the mutual fund industry, there has been a tenfold increase in just three years.").

[206] *See* Chernenko et al., *supra* note 4, at 20; *see also* Gornall & Strabulaev, *supra* note 176. Additionally, third-party equity marketplaces such as EquityZen allow individual investors to gain direct exposure to these unicorns. *See* Vedant Suri, *Unicorns, Dinosaurs & The Elephant Room – An Update on the Tech Animal Kingdom*, EQUITYZEN (Aug. 19, 2015), https://equityzen.com/knowledge-center/blog/update-tech-animal-kingdom [https://perma.cc/ES6X-RZ3J].

[207] Ola Bengtsson & John R.M. Hand, *CEO Compensation in Venture-Backed Firms,* 26 J. BUS. VENTURING 391, 410 (2011) ("Without multiple injections of new capital, a firm of the type backed by venture capital is likely to go bankrupt rather than realize its goal of going public or being acquired.").

investment.[208] Private investment allows the firm's founder to defer the costs associated with going public[209] and avoid the pressures associated with being a public company,[210] especially pressures to not invest in innovation and focus on

[208] *See* Zvi Griliches, *The Search for R&D Spillovers*, 94 SCANDINAVIAN J. ECON. 29, 32 (Supp. 1992).

[209] Kwon et al., *supra* note 175, at 27. On the regulatory costs of going public, see generally Anne Beyer, Daniel A. Cohen, Thomas Z. Lys & Beverly R. Walther, *The Financial Reporting Environment: Review of the Recent Literature,* 50 J. ACCT. & ECON. 296 (2010).

[210] Another plausible cause for the rise of the unicorn firms is that lucrative technology companies choose to stay private as long as possible in order to escape the pressures toward short-term strategies that stem from public ownership. *See The Endangered Public Company*, ECONOMIST (May 19, 2012), https://www.economist.com/leaders/2012/05/19/the-endangered-public-company. [https://perma.cc/7HJS-6T5Z]; *see also* LYNN STOUT, THE SHAREHOLDER VALUE MYTH: HOW PUTTING SHAREHOLDERS FIRST HARMS INVESTORS, CORPORATIONS, AND THE PUBLIC 7 (2012) (asserting the short-term focus of investors and corporate boards is currently one of the key issues in the corporate governance debate); Thomas J. Chemmanur & Yawen Jiao, *Dual Class IPOs: A Theoretical Analysis*, 36 J. BANKING & FIN. 305, 316 (2012). For discussion on shareholder value, see COLIN MAYER, FIRM COMMITMENT (2013); *see also* Ira M. Millstein, *Re-Examining Board Priorities in an Era of Activism*, N.Y. TIMES (Mar. 8, 2013) http://dealbook.nytimes.com/2013/03/08/re-examining-board-priorities-in-an-era-of-activism/?_r=0 [https://perma.cc/T434-PFH8] ("[C]orporate boards around the country should re-examine their priorities and figure out to whom they owe their fiduciary duties."); *see also* STOUT, *supra,* at 7. Stout also expresses this concern with regards to the innovation ability of large public companies. *See* Lynn A. Stout, *The Corporation as a Time Machine: Intergenerational Equity, Intergenerational Efficiency, and the Corporate Form*, 38 SEATTLE U. L. REV. 685, 710–11 (2015); *see also* John Armour, Henry Hansmann & Reinier Kraakman, *What is Corporate Law?, in* THE ANATOMY OF CORPORATE LAW: A COMPARATIVE AND FUNCTIONAL APPROACH (3d ed. 2017); David Ciepley, *Beyond Public And Private: Toward a Political Theory of the Corporation*, 107 AM. POL. SCI. REV. 139, 148–49 (2013); Bill Buxton, *The Price of Forgoing Basic Research*, BLOOMBERG (Dec. 17, 2008), https://www.bloomberg.com/news/articles/2008-12-17/the-price-of-forgoing-basic-researchbusinessweek-business-news-stock-market-and-financial-advice [perma.cc/7R96-JCK4]; *Out of the Dusty Labs*, ECONOMIST (Mar. 1, 2007), http://www.economist.com/node/8769863 [https://perma.cc/M5S5-Q6DU].

short-term results.[211] As a result of the entrance of these new market players, unicorn founders now have more leverage to negotiate founder friendly rounds with venture capital firms, who continue to play an important role in the governance structure of startup firms.[212]

Policymakers, regulators, and scholars should take these new market trends into account and advance the traditional entrepreneurship literature, which has focused on VCs as the dominant source of financing start-ups over the last thirty years.[213] Future research or other papers can address the question of mutual funds' and sovereign wealth funds' incentives for investing in early stage technology development when they cannot capture the full benefits of such technologies.[214]

C. Changes to Governance Structure of Unicorns

New entrepreneurial startup firms aspire to receive VC backing and become the next Apple, Facebook, Cisco, Google,

211 Kwon et al., *supra* note 175, at 38. *See also* John Asker, Joan Farre-Mensa & Alexander Ljungqvist, *Corporate Investment and Stock Market Listing: A Puzzle?*, 28 REV. FIN. STUD. 342, 346 (2015) (showing empirical results that private firms invest substantially more than public ones, and that private firms' investment decisions are around four times more responsive to changes in investment opportunities than are those of public firms).

212 *See* Robert P. Bartlett, III, *Venture Capital, Agency Costs, and the False Dichotomy of the Corporation*, 54 UCLA L. REV. 37, 44 (2006) (proposing a new dynamic agency cost model of the firm).

213 *See* Gompers et al., *supra* note 174, at 2.

214 *See, e.g.*, BRANSCOMB & AUERSWALD, *supra* note 48, at 14–15; Bronwyn H. Hall, *The Private and Social Returns to Research and Development*, *in* TECHNOLOGY, R&D, AND THE ECONOMY 140, 159–60 (Bruce L.R. Smith & Claude E. Barfield eds., 1996) (providing evidence that the social return to R&D is much above the private return); Griliches, *supra* note 208, at 32–33 (evaluating calculations of the social rates of return for research and development); Yoram Margalioth, *Not a Panacea for Economic Growth: The Case of Accelerated Depreciation*, 26 VA. TAX REV. 493, 501 (2007).

or Intel.[215] VC-backed startups are the primary force in the economy responsible for both job creation and economic growth.[216]

Furthermore, according to Gompers and Lerner,[217] if a startup firm does not have VC backing, the chances are high (approximately ninety percent) that the firm will fail within three years from its formation.[218]

Many scholars consider the American-VC market an essential element of the U.S. national innovation system, and it has been extensively imitated around the world.[219] By financing capital hungry young start-ups, who present abundant hazards and uncertainties that often deter other "regular" investors, VC investors continue to help to promote innovation in the U.S. (and around the world.)[220]

The ways in which VCs fund innovation dominates the entrepreneurial finance literature.[221] A skillful VC fund will

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[215] *See* Mary J. Dent, *A Rose by Any Other Name: How Labels Get in the Way of U.S. Innovation Policy*, 8 BERKELEY BUS. L.J. 128, 134 (2011).

[216] *See id.* at 134–35.

[217] *See* Lerner & Gompers, *supra* note 48 ("For newly launched enterprises without venture capital backing, failure is almost assured: nearly 90 percent fail within three years.").

[218] *Id.* This alarming study illustrates the authenticity of a well-known expression about the financing gap in the startup world called the "valley of death." *See supra* note 48. It refers to the difficulty of entrepreneurs to cover the negative cash flow in the early stages of their startup firm, before their new product or service is commercialized and brings in revenue from real customers or investors. *See generally id.*

[219] *See* David H. Hsu & Martin Kenney, *Organizing Venture Capital: The Rise and Demise of American Research & Development Corporation, 1946–1973*, 14 INDUS. & CORP. CHANGE 579, 579 (2005).

[220] VCs face similar hazards and uncertainties. According to a report by the U.S. General Accounting Office, only ten percent of such funds manage to earn their expected return on their investment. *See* GAO REPORT, *supra* note 47, at 19 (citation omitted). According to Hsu and Kenney, VC has even been developed into an asset category, which is commonly acknowledged by large U.S. institutional and pension funds. Hsu & Kenney, *supra* note 219, at 1.

[221] *See* Ibrahim, *supra* note 197, at 720.

help the startup develop the company.[222] Not only do VCs provide a startup (budding or unicorn) with cash,[223] but also, and more importantly, the VC managers provide services such as mentoring to budding startups and networks of additional investors, potential acquirers, new partners and customers.[224]

Founders, however, may worry about their ability to maintain control over the firm following new rounds of financing. The traditional pattern is that the founders get diluted and must give up voting control to secure more funding.[225] If the VC has control over the board of directors, it can also fire the founders. In fact, Fried and Broughman show that the Mark Zuckerberg's example (of a founder maintaining control after an IPO) is an exception and not the rule.[226] Fried and Broughman challenge Black and Gilson's traditional "call option on control" finance theory, which links VC and stock markets, and they further prove that the ex-ante likelihood of founders reacquiring control via IPO is extremely low.[227]

Recent research further shows that there is an increase in the number of technology companies that decide to go public with dual class of share structures because their founders

[222] *See* DAN SENOR & SAUL SINGER, START-UP NATION: THE STORY OF ISRAEL'S ECONOMIC MIRACLE 161 (2009); *see also* Lindsey, *supra* note 50, at 1137 (noting that venture capital firms add value by facilitating interaction within their networks); Ola Bengtsson & David H. Hsu, *How Do Venture Capital Partners Match with Startup Founders?* (Mar. 11, 2010) (unpublished manuscript) (finding that founders seek VC partners with complementary experience), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1568131 [https://perma.cc/9HS3-9JJW].

[223] SENOR & SINGER, *supra* note 222, at 161.

[224] *See id.*; Lindsey, *supra* note 50, at 1139 (discussing the value venture capitalists add by "helping firms to recruit key managers . . . monitoring and advising through service on the company's Board of Directors . . . implementing other strong governance mechanisms . . . . [and] [f]acilitating strategic alliances[.]").

[225] Bob Zider, *How Venture Capital Works*, HARV. BUS. REV., Nov.–Dec. 1998, https://hbr.org/1998/11/how-venture-capital-works [https://perma.cc/999W-U7KR].

[226] *See* Broughman & Fried, *supra* note 167.

[227] *Id.*

want to avoid the pressures of short-termism and push to retain more influence over "their" firms, the management, and strategy.[228]

Recent governance and share issuance strategies have also enabled some unicorn founders to maintain control over their company. Changes have been made to the traditional model of startup funding and the governance structures of VC-backed firms as founders of unicorn firms push to stay private longer and maintain control over the firm. Founders are able to do so by impeding a sale, where VC-investment rounds are structured as "friendly" financing rounds.

As noted above, VC-backed startups in the United States have historically issued two classes of stock: common and preferred, which includes several series with new rounds of financing. New practices have altered the traditional model of financing and startup governance structure, which have in turn have provided founders with leverage in their negotiations with VCs (resulting in founder-friendly terms in formation and financing documents).

Super-voting stock allows unicorn founders to maintain control over the company for a longer period of time as founder approval is needed for any future amendments of the charter (such amendments are required for most rounds of financings and approving liquidation events and sales.)[229]

Unicorn founders wishing to use this structure will typically prepare the company's formation documents to

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[228] *See* Joann S. Lublin & Spencer E. Ante, *A Fight in Silicon Valley: Founders Push for Control*, WALL ST. J., (July 11, 2012), https://www.wsj.com/articles/SB10001424052702303292204577519134168240996 (on file with the *Columbia Business Law Review*). According to Broughman and Fried, however, only fifteen percent of VC-backed IPOs from 2010 to 2012 were dual class. Broughman & Fried, *supra* note 167, at 24 tbl.2.

[229] *See* Jonathan Axelrad, *Founder Friendly Stock Alternatives I: Keeping Control and Super-Voting Common Stock*, DLA PIPER, https://www.dlapiperaccelerate.com/knowledge/2017/founder-friendly-stock-alternatives-keeping-control-and-super-voting-common-stock-.html [https://perma.cc/A8A4-EJWP].

provide for two types of common stock (Classes A and B.)[230] Class B will carry multiple votes per share (such as ten to twenty) and will be granted to the founders.[231] Class A will carry only one vote per share and will be reserved for issuance, under the unicorn's stock option plan, to rank-and-file employees.[232]

This structure is designed to give founders control over the company in their capacity as shareholders, even if their ownership stake is diluted in the future through additional rounds of financing. It should be noted that the founders will have to have leverage to negotiate this friendly-term with VCs and other investors in each rounds of financing. It is not guaranteed to last forever, even if included in formation documents.

Super-voting stock at the board level is another use of common stock, which confers a multiple of votes for board seats (such as a multiple of two to five per vote) to its holder.[233] This type of common stock gives founders the power to elect directors to the board and have control over the board's major decisions.[234] This structure can have adverse effects on the board's ability to follow its fiduciary duties, but those issues fall outside the scope of this Article.

FF preferred stock is a new type of common stock that does not have the traditional lock-in.[235] It is issued to founders, like

[230] *See id.*

[231] *See id.*

[232] Facebook, Palantir, Snapchat, Uber, and Airbnb each issued two classes of common stock with the preferred class in each case carrying ten votes per share and the common stock carrying one. *See* Cytowski & Partners, *The Anatomy of a Unicorn*, MEDIUM (Aug. 15, 2018), https://medium.com/@cytlaw/the-anatomy-of-a-unicorn-3298df383e03 [https://perma.cc/35V7-3ZZX]; s*ee also* Caine Moss & Emma Mann-Meginniss, *5 Founder-Friendly Financing Terms that Give Power to Entrepreneurs*, VENTURE BEAT (Nov. 16, 2014), https://venturebeat.com/2014/11/16/5-founder-friendly-financing-terms-that-give-power-to-entrepreneurs/ [https://perma.cc/Z5EA-BYF7].

[233] *See* Moss & Mann-Meginniss, *supra* note 232.

[234] *See id.*

[235] *See id.*

common stock, but has a special conversion right that allows its holder to cash out prior to a traditional liquidity event such as an IPO or sale.[236] The company will issue a portion of the founder's equity in the form of FF preferred stock, and the rest in regular common stock.[237] The FF preferred stock allows the founder to get liquidity with future VC investment.[238] The VC can buy the FF preferred stock from the founder, and the FF preferred stock is then converted to the investor's preferred stock.[239] This practice can impact the company's option plan (affect the price at which the options are issued,) and have adverse tax consequences for the founder and the company.[240]

Typically, VCs negotiate for and get voting-control provisions, which give them voting blocks on liquidation and raising additional capital.[241] By giving common stock holders the same voting-control provisions, unicorns give founders the freedom to dictate when and whether the company sells or raises capital.[242] VCs will always negotiate for and receive some protections in their investment documents. If founders are able to negotiate for the same protections, then they will be able to limit the VC's control over the decision to liquidate the company.[243]

Founders are now also able to negotiate and receive aggressive founder vesting provisions.[244] The traditional

[236] *See id.*

[237] *See id.*

[238] *See id.*

[239] *See id.*

[240] *See id.*

[241] *See* Trent Dykes, *Financing Your Startup: Understanding Control and Voting Issues (Part I, Board Controls)*, VENTURE ALLEY (Mar. 3, 2011), https://www.theventurealley.com/2011/03/financing-your-startup-understanding-control-and-voting-issues-part-1-board-controls/ [https://perma.cc/7DV2-PTH8].

[242] *See* Moss & Mann-Meginniss, *supra* note 232.

[243] For example, Snapchat does not give its series C, D, E, or F preferred shareholders any voting rights or anti-dilution protection, "essentially allowing them to just invest and tag along for the ride." Cytowski & Partners, *supra* note 232.

[244] *See* Moss & Mann-Meginniss, *supra* note 232.

vesting schedule is four-year with a one-year cliff vesting.[245] Certain founders are negotiating for an accelerated vesting time frame of three years or less, sometimes without the cliff vesting.[246] These terms for acceleration become effective in the event of a change of control provisions or involuntary terminations of the founders without cause.[247]

These structures can, like super-voting stock at the board level, have adverse effects on the board's fiduciary duties and can also subject the investors to a hold up and abuse by the founders. However, these issues are outside the scope of this Article.

IV. POSSIBLE SOLUTIONS

Stock option plans and equity compensation agreements have been used by private companies for many years. Options were traditionally designed with a timeframe of four years to IPO or sale. Today, however, unicorns are staying private longer, and conducting an IPO or a sale much later: on average after eleven years, and, in many cases, not at all.[248] During this long period, there is always a chance that the value of the unicorn's common stock will drop below the strike price, rendering the options practically worthless to their holder.

Additionally, the unicorn's valuation might fluctuate after the firm grants options to employees. These scenarios can lead to employees with out-of-the-money options. Because it is

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[245] *See id.*

[246] *See generally Founder Vesting: An Alternative View*, MEDIUM (Feb. 10, 2017), https://medium.com/@whoneedslaw/some-say-that-vesting-is-the-most-important-thing-for-startup-founders-639b6583d8d2 [https://perma.cc/7CL4-Q42F].

[247] *See* Moss & Mann-Meginniss, *supra* note 232.

[248] *See* Doidge et al., *Eclipse of the Public Corporation*, supra note 6; Gao et al., *supra* note 6; *see also* Jay R. Ritter, *Initial Public Offerings: Updated Statistics*, U. FLA., https://site.warrington.ufl.edu/ritter/files/2016/03/Initial-Public-Offerings-Updated-Statistics-2016-03-08.pdf [https://perma.cc/DD66-TC3W].

usually illegal to backdate employee options,[249] unicorns will be compelled to re-issue options to employees in order to keep them motivated. Unicorn firms should experiment with revisions to traditional equity compensation plans in order to recreate the incentives and alignment of interests that were present before the new equilibrium.

Start-ups can deal with the tax considerations and illiquidity of unicorn shares in several ways. Section IV.A presents the currently proposed alternatives to the traditional stock option plan (and employee contract), and critiques them. Section IV.B describes the present alternatives to the traditional liquidity mechanisms and discusses their pitfalls. Section IV.C proposes new disclosure requirements as an alternative route to fixing these issues.

A. Contractual Alternatives

Unicorn firms and the pool of employees are repeat players in aggressive technology markets. The unicorn employees are the intellectual "assets" of the firm, and the firm depends on their talent to innovate and grow. High turnover rates are therefore detrimental to a unicorn's business model. The firm also cares a great deal about maintaining its reputation. Companies with a bad reputation will probably have a harder time attracting new talent, in such competitive markets.

As discussed above, unicorn employees are increasingly discontent with their equity compensation because of extreme "lock-in" of their capital due to the illiquidity of their stock and the fact that founders, senior management, and some investors are not in a rush to do an IPO. Further, several recent changes to market dynamics and new market players (mutual funds and sovereign wealth funds) give unicorn founders (the common shareholders) greater power vis-à-vis preferred shareholders to impede a sale and keep the company private longer. All these factors contribute to the shift in employees' expectations.

[249] *See* Jesse M. Fried, *Option Backdating and Its Implications*, 65 WASH. & LEE L. REV. 853, 855 (2008).

The high-tech industry is plagued with uncertainty and information asymmetry, as discussed above.[250] There is a view in finance and economics[251] that contracts have limits and that reputational threats to parties serve as a disciplining device. According to incomplete contracting theory, the stock option plans and other equity compensation agreements between the unicorn firm and its employees are subject to renegotiation. A contract cannot prevent unforeseen contingencies that can trigger conflicts between the parties in the future.[252] Renegotiation therefore is necessary because unicorn firms likely care about their reputation. Unicorn firms could also experiment with alternative contracting and organizational solutions to better monitor their labor force and deal with their employees' public complaints.

This Section raises the question of whether such renegotiations can reach optimal employee contract for the different types of unicorn employees, including rank and file, management, and founders. There are many problems that arise when designing employment contracts and aligning employee incentives. Several incentive problems are addressed in the following sections, including those created by preferred stock liquidation preferences ("overhang")[253] or by lack of liquidity.

250 *See supra* notes 123–26 and accompanying text.

251 The principal-agent problem is an essential element of the "incomplete contracts" view of the firm. *See, e.g.*, Philippe Aghion & Patrick Bolton, *An Incomplete Contracts Approach to Financial Contracting*, 59 REV. ECON. STUD. 473 (1992); R. H. Coase, *The Nature of the Firm*, 4 ECONOMICA 386 (1937); Eugene F. Fama & Michael C. Jensen, *Separation of Ownership and Control*, 26 J.L. & ECON. 301 (1983); Stuart L. Hart, *A Natural-Resource-Based View of the Firm*, 20 ACAD. MGMT. REV. 986 (1995); Jensen & Meckling, *supra* note 51; *see also* W. Bentley MacLeod, *Reputations, Relationships and the Enforcement of Incomplete Contract*s (Ctr. for Econ. Studies & Ifo Inst. for Econ. Research, Working Paper No. 1730, 2006), https://ssrn.com/abstract=885347 [https://perma.cc/843T-XUQE].

252 *See* Robert E. Scott, *Conflict and Cooperation in Long-Term Contracts*, 75 CALIF. L. REV. 2005 (1987).

253 Broughman & Fried, *supra* note 20, at 385.

Unicorn firms currently use (and will likely continue to use) equity compensation aggressively (including stock option or restricted stock units) to attract, engage, and retain talent. The following are some alternatives that are used to deal with the current issues that arise concerning incentive compensation for different kinds of employees, including those with options that are about to expire and others who wish to leave (triggering the ninety-day exercise window).

This Section presents and critiques these alternatives, and make suggestions for the future. The suggestions are meant to allow employees to maintain their incentive compensation and perhaps defer their tax liability. They do not solve the liquidity problem, but liquidity is also discussed herein.

1. Outright Stock Grants to Founders

For founders, outright stock grants (instead of options) are typical and are usually issued at the formation stage of the business.[254] The advantages of issuing outright stock to founders is that the stock is issued at a low price (as valuation of the company has yet to take off) and it gives them certain benefits of direct stock ownership. It also avoids some of the tax drawbacks of stock options.[255]

As noted in Part III, the founders at unicorn firms are already capable of protecting their interests. Often, they are the ones who are pushing the companies to stay private longer. Accordingly, the equity compensation problems discussed herein are largely not relevant to unicorn founders.

2. Section 83(i) Election for Early Employees

Early employees who join a startup at the formation stages (pre-unicorn status) can make a section 83(i) election (which is analogous to the section 83(b) election) if all the

[254] *See* CONSTANCE E. BAGLEY & CRAIG E. DAUCHY, THE ENTREPRENEUR'S GUIDE TO LAW AND STRATEGY 96 (5th ed. 2018).

[255] *Id.* at 96.

requirements are met.[256] These elections trigger the holding period, allowing employees to meet the requirements for long-term capital gains rates. The election must be made no later than thirty days after the option exercise or restricted stock unit vesting date.

While use of the section 83(i) election does not solve the illiquidity problem, it prevents early employees from carrying the excessive risk of paying large amounts of money out-of-pocket for exercising and paying taxes for profit that might not materialize.[257]

3. Extensions to Post Termination Exercise Periods

As noted above, there is a heated debate in Silicon Valley over the fairness of the ninety-day stock option exercise period for departing employees.[258] Ex-employees of unicorn firms complain that they helped build the unicorn, but after leaving the firm, cannot enjoy the fruits of their labor. Instead, they were faced with a dilemma—to exercise or forfeit? The

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[256] On the section 83(b) election, *see id.* at 485; *see also* Ronald J. Gilson & David M. Schizer, *Understanding Venture Capital Structure: A Tax Explanation for Convertible Preferred Stock*, 116 HARV. L. REV. 874, 894–95 (2003); David I. Walker, *The Non-Option: Understanding the Dearth of Discounted Employee Stock Options*, 89 B.U. L. REV. 1505, 1556–57 (2009).

[257] *See* Bruce Brumberg, *IRS Guidance on Private Company Grants of Stock Options and RSUs Provide Limited Support*, FORBES (Dec. 10, 2018), https://www.forbes.com/sites/brucebrumberg/2018/12/10/irs-guidance-on-private-company-grants-of-stock-options-and-rsus-provides-limited-support/#336702746eb9 [https://perma.cc/6JJS-7AWK]; J. Marc Fosse & Angel L. Garrett, *Section 83(i) of the Internal Revenue Code – Qualified Equity Grant Programs Permit Employees to Elect to Defer Income Taxes on Stock Options or RSUs*, TRUCKER HUSS (Jan. 11, 2018), https://www.truckerhuss.com/2018/01/new-section-83i-of-the-internal-revenue-code-qualified-equity-grant-programs-permit-employees-to-elect-to-defer-income-taxes-on-stock-options-or-rsus/ [https://perma.cc/S5BY-KERK].

[258] *See, e.g.*, Dash Victor, *Extending the Option Exercise Period—A Tactical Guide*, MEDIUM (Feb. 9, 2016), https://medium.com/@dashvictor/extending-the-option-exercise-period-a-tactical-guide-16e0c10ec46d [https://perma.cc/7Z7P-9E3N].

unicorns' valuations are by definition very high, but some employees cannot afford to pay for the taxes and exercise price. Even if they were able to pay, the gain may never materialize if the company never goes public or its value declines below the strike price.[259]

To deal with these complaints, several companies including Quora,[260] Pinterest,[261] and Coinbase,[262] have made changes to their option plans, extending the exercise period for ex-employees to anywhere from one to ten-years.[263]

There is a call in Silicon Valley for other unicorns to join these firms and extend their exercise periods.[264] By extending post-termination exercise periods, companies would help encourage equality among unicorn employees. Ex-employees

[259] *See* Phil Haslett, *Weekly Update #216: What the 90-Day Option Exercise Rule Means for Pre-IPO Secondaries*, EQUITYZEN, https://equityzen.com/knowledge-center/newsletter/weekly-update-216/ [https://perma.cc/Y8J5-UTNP] (discussing layoffs); Connie Loizos, *Dear Unicorn, Exit Please*, TECHCRUNCH (July 23, 2015), https://techcrunch.com/2015/07/23/dear-unicorn-exit-please/ [https://perma.cc/DX8U-6TM2].

[260] Ed Zimmerman, *Stock Options: VC-Backed Startups Extend Post-Termination Exercise Period (PTEP)*, FORBES (Aug. 27, 2017), https://www.forbes.com/sites/edwardzimmerman/2017/08/27/stock-options-vc-backed-startups-extend-post-termination-exercise-period-ptep/#7c7517595568 [https://perma.cc/7XF6-FWG8].

[261] *See* Lynda Galligan, *Startups Take Note: Pinterest Will Allow Ex-Employees to Keep Vested Stock Options for Seven Years*, FOUNDERS WORKBENCH BLOG (Mar. 26, 2015), https://www.foundersworkbench.com/startups-take-note-pinterest-will-allow-ex-employees-to-keep-vested-stock-options-for-seven-years/ [https://perma.cc/DB5D-LT4E] (noting that Pinterest granted a seven-year stock option extension for employees with at least two years of tenure at the company).

[262] *See* Brian Armstrong, *Improving Equity Compensation at Coinbase,* COINBASE BLOG (Aug. 5, 2015), https://blog.coinbase.com/improving-equity-compensation-at-coinbase-8749979409c3 [https://perma.cc/LN6K-73E6].

[263] *See* Victor, *supra* note 258.

[264] *See* Harj Taggar, *Fixing the Inequity of Startup Equity*, TRIPLEBYTE (Mar. 5, 2016), https://triplebyte.com/blog/fixing-the-inequity-of-startup-equity [https://perma.cc/Z6GW-3PX4] (discussing a proposal by Y Combinator, a VC, calling for a ten-year rule).

would be able to choose whether or not to exercise the options at a later date, taking into consideration liquidity events (such as an IPO) that make exercising worthwhile.[265]

This call for a one-size-fits-all adoption of extended exercise windows is a flawed solution, though.[266] The extension of exercise windows will benefit ex-employees (who are not contributing to the firm any longer), but will also be to the detriment of the current unicorn employees who are still contributing.[267] In other words, an extended exercise window will cause a "direct wealth transfer"[268] from the current employees, who choose to stay and contribute to the company's growth, to ex-employees, who may even be working for a competitor.[269]

Such a broad rule is detrimental to a firm's ability to retain, engage and attract employees. If such a rule is adopted, employees are incentivized to diversify their investments by quitting their jobs immediately after receiving equity options. These incentives are exacerbated by the real risk that the unicorn will never IPO, will fail, or will enter into a trade sale. The employees will then join another tech company to get more options from the new employer, while maintaining a ten-year option to exercise from the previous employer, without contributing to the growth of the company.[270]

Moreover, extending the exercise period may be cumbersome for companies, who will be required to keep track of a larger number of common shareholders. This concern is especially relevant when common shareholder approval is needed for authorization for certain actions, such as for

[265] Kupor, *supra* note 2.

[266] *See* Taggar, *supra* note 264.

[267] *See* Kupor, *supra* note 2.

[268] Irvin Chan developed a simple model of this wealth transfer. *See id.* His model shows that when ninety-day windows are extended to ten years, current employees suffer an eighty percent dilution, while former employees, who no longer contribute to the company's growth, get to keep their options. *See id.*

[269] *See id.*

[270] *See id.*

issuance of new shares to existing or new employees, acquisitions, or raising capital. However, this approach may work better for the growing number of dual-class companies, in which founders retain some control even as the number of outstanding common shares grows.

This practice will contribute to the existing problem of ex- or current unicorn employees (and other investors), who turn to secondary markets for liquidity. Under federal securities laws, the sale on these platforms can be challenged if the seller failed to disclose all material information about the stock to the buyer.

Finally, the differing tax treatment between ISOs and NSOs discussed earlier limits the efficacy of this proposal. From a tax implication perspective, ISOs receive better tax treatment, but according to the current tax code, ISOs that are not exercised within ninety-days of departure become NSOs.[271] Extending the exercise period therefore undermines the benefits of ISOs' more favorable tax treatment.[272]

4. Back-End Loaded Stock Vesting

Another suggestion that has been floated is issuing back-end loaded stock options.[273] This suggestion changes the traditional cliff vesting method to discourage employees from leaving the firm,[274] and follows Snapchat's example. Snapchat structured their vesting schedule so that employees vested ten percent after the first year, twenty percent after the second

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[271] *See supra* Section II.A.2.

[272] *See supra* Section II.A.2.

[273] *See* Scott Kupor, *Recommendations for Startup Employee Option Plans*, ANDREESSEN HOROWITZ (July 26, 2016), https://a16z.com/2016/07/26/options-plan/ [https://perma.cc/39LH-AMP9].

[274] A clawback provision is usually added to employment contracts to control incentives and option payouts. If the performance, for example, should worsen, the clawback provision forces the employee to give a portion of the money back. If it is back-ended, the employee may end up with little equity if the company decides that she is not performing at the fourth year.

year, thirty percent after the third, and forty percent at the end of the fourth year.[275]

Labor law considerations are significant for this practice because unicorns are private firms, and most of them are located in Silicon Valley.[276] Therefore, California labor law will apply to companies and employees located in California, considering that "labor is one of two key inputs to the firm".[277]

Back-end loaded stock vesting therefore exposes the company to potential litigation for wrongful termination. One of the reasons for the traditional design of cliff vesting is to protect the company from "dead weight" lawsuits.[278]

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[275] *See* Jason Nazar, *The Complete Guide to Understanding Equity Compensation at Tech Companies*, FORTUNE (Sept. 27, 2016), http://fortune.com/2016/09/27/the-complete-guide-to-understanding-equity-compensation-at-tech-companies/ [https://perma.cc/7YWJ-2UL6]; *see also* Kupor, *supra* note 273.

[276] Silicon Valley traditionally benefited from open labor markets and solid social networks, which drove entrepreneurship and experimentation. Yet, today, Silicon Valley is at the center of a diversifying network of economies and its status quo is changing, due to the openings of new markets, the emergence of new international relationships, transformation of the traditional startup financing model, and the rise of unicorn firms. *See* Annalee Saxenian, *The New Argonauts*, WORDS INTO ACTION: INT'L MONETARY FUND WORLD BANK GROUP BOARD OF GOVERNORS ANN. MEETINGS, Sept. 11–20, 2006, at 99, 109, https://vdocuments.site/anna-lee-saxenian-the-new-argonauts.html [https://perma.cc/M2SE-3RT3]; *see also* ANNALEE SAXENIAN, THE NEW ARGONAUTS: REGIONAL ADVANTAGE IN A GLOBAL ECONOMY 37 (2006).

[277] On the intersection of labor and capital as two principal inputs to the firm, see Rock & Wachter, *supra* note 101, at 121; see also Edward B. Rock & Michael L. Wachter, *Islands of Conscious Power: Law, Norms and the Self-Governing Corporation*, 149 U. PA. L. REV. 1619 (2001).

[278] With regards to "dead weight" lawsuits, the California Counsel Group notes:

> No one likes dead weight, especially in a startup. As the startup team continues to work hard creating value for the company, an absent founder can create morale and motivation issues among the rest of the team.
>
> Why should absent founders get to share in the potential upside of the company when they have stopped doing what they said that they would do to create value for

Generally, the employment at-will doctrine gives the company the power to discharge the employee anytime without cause.[279] But certain states, including California, impose an implied covenant of good faith and fair dealing to even at-will arrangements.[280] Employees who are not carrying their weight and are fired under the proposed arrangement can sue the company for wrongful termination, claiming that the company wrongfully discharged them to prevent a significant percentage of their options from vesting and thereby deprived them of benefits they had already "earned."[281]

5. Restricted Stock Units

Many companies, including Uber, issue Restricted Stock Units ("RSU"s) once they reach the one-billion-dollar valuation threshold.[282] RSUs are a company's promise to pay a bonus in the form of shares or cash (in an amount equal to the value of the share) to an employee in the future.[283] RSUs, like options, can be structured so that they vest over time once the conditions are satisfied.

There are several advantages to using RSUs. First, RSUs are not as risky for employees; unlike options, RSUs have downside protection, because they do not have a strike

> the company? Put simply – they shouldn't. And that's why it *is critical that each startup establish vesting arrangements among the founders from the start*.

Stock Vesting: How It Works and Why It Matters, CAL. COUNS. GROUP, https://calcounselgroup.com/2017/05/22/stock-vesting-how-it-works-and-why-it-matters/ [https://perma.cc/AB5M-BEQK] (emphasis in original).

279 *See generally* Wendy J. Hannum, *Good Cause: California's New Exception to the At-Will Employment Doctrine,* 23 SANTA CLARA L. REV. 263 (1983).

280 *Id.*

281 *See, e.g.*, Scully v. US WATS, Inc., 238 F.3d 497 (3d Cir. 2001).

282 *See* AJ Frank, *Don't Let Recruiters Trick You (Or How to Evaluate an Offer from a Technology Company)*, MEDIUM (Jan. 9, 2018), https://medium.com/@ajfrank/dont-let-recruiters-trick-you-or-how-to-evaluate-an-offer-from-a-technology-company-d3344b4c07b7 [https://perma.cc/4YYC-VK5C].

283 BAGLEY & SAVAGE, *supra* note 46, at 531.

price.[284] Second, unlike options, RSUs will not be worthless as they are not subject to the unicorn stock price fluctuations. RSUs will always have value equal to the price of the stock regardless of when they were granted to employees. Third, granting RSUs helps the company mitigate the risk of employees trading on secondary markets, as RSUs cannot be sold prior to an IPO.[285]

RSUs are a good solution for wealthy cash-hoarding unicorns, as opposed to cash-poor early startups, as the unicorn can pay the employee in cash or by stock upon vesting.[286] Unlike the option, employees can hold on to the RSUs until they fully vest upon a liquidity event even if they already left the unicorn.[287]

Although RSUs have greater downside risk protection, they have less upside potential. Employees will generally receive fewer RSUs for the same maturity because RSUs have value regardless of how well the issuing company performs after the grant. Additionally, according to section 409A of the Internal Revenue Code,[288] RSUs are taxed as ordinary income when received, if the vesting conditions are satisfied. The employees only receive long-term capital gains tax treatment if they convert their RSUs to stock and hold the stock for more than twelve months. Additionally, as RSUs cannot be sold on a secondary market, they do not solve the illiquidity problem.

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284 *See* Jeron Paul, *RSUs vs. Options: Why RSUs (Restricted Stock Units) Could Be Better Than Stock Options at Your Private Company*, CAPSHARE BLOG (July 9, 2016), https://www.capshare.com/blog/rsus-vs-options/ [http://perma.cc/F9H5-JTB4].

285 *See generally A Guide to Employee Liquidity Programs: Why and How Companies Align the Interests of All Parties*, FOUNDERS CIRCLE, http://www.founderscircle.com/secondary-employee-aligned-liquidity-guide [https://perma.cc/U3PD-4RBW].

286 BAGLEY & SAVAGE, *supra* note 46, at 531.

287 RSUs are subject to section 409A of the Internal Revenue Code, and will be taxed as ordinary income, when the stock is received. BAGLEY & SAVAGE, *supra* note 46, at 531.

288 I.R.C. § 409A (West 2017) (including deferred compensation under nonqualified deferred compensation plans in gross income).

B. Liquidity Alternatives

Several alternative approaches have also been proposed to solve the illiquidity problem. These alternatives include direct listing, the use of electronic secondary markets, secondary sales to individual buyers, and efforts to allow employees to gain liquidity while letting founders maintain control[289] over the management of their company.[290]

1. Direct Listing

Spotify, the Swedish music-streaming-technology unicorn, went public last year by launching a direct listing on the New

[289] *See* Nicolas Grabar, David Lopez & Andrea Basham, *A Look Under the Hood of Spotify's Direct Listing*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Apr. 26, 2018), https://corpgov.law.harvard.edu/2018/04/26/a-look-under-the-hood-of-spotifys-direct-listing/ [http://perma.cc/BP3D-S24B].

[290] Before direct listing, tech founders typically used dual class stock. For more on dual class stock and "minority controlling shareholders" see Lucian A. Bebchuk & Kobi Kastiel, *The Untenable Case for Perpetual Dual-Class Stock*, 103 VA. L. REV. 585, 594–95 (2017) ("Furthermore, there has been an upward trend in the adoption of dual class stock since Google went public with a dual-class structure in 2004 and was followed by well-known tech companies, such as Facebook, Groupon, LinkedIn, Snap, Trip Advisor, and Zynga. Indeed, according to data-provider Dealogic, '[m]ore than 13.5 percent of the 133 companies listing shares on United States exchanges in 2015 have set up a dual-class structure . . . compare[d] with . . . just 1 percent in 2005.'"). For a detailed account of the history of dual-class structures in the United States, see Joel Seligman, *Equal Protection in Shareholder Voting Rights: The One Common Share, One Vote Controversy*, 54 GEO. WASH. L. REV. 687, 693–707 (1986). For new stock exchange rules authorizing dual class listings, see Voting Rights, NYSE Listed Company Manual § 313.00 (2018) (permitting the issuance of multiple classes prior to the IPO); *see also* Nasdaq Stock Market Equity Rules § 5640, IM5640, Voting Rights Policy (2018); Press Release, Council of Institutional Inv'rs, Institutional Investors Oppose Stitch Fix Dual-Class Structure but Welcome Sunset Provision, (Nov. 17, 2017), https://advisornews.com/oarticle/institutional-investors-oppose-stitch-fix-dual-class-structure-but-welcome-sunset-provision#.W-TKzZNKjIU [http://perma.cc/8SGE-4Z4L].

York Stock Exchange,[291] in order to "directly match public buyers with private sellers."[292] The direct listing allows Spotify shareholders, investors, and employees to sell shares in the open public stock market.[293] However, whether unicorn firms should follow Spotify and use direct listing to facilitate liquidity depends on the following questions: Did Spotify's direct listing serve the interests of the employees and the firm?[294] Did Spotify have an adequate price discovery process? These questions warrant further research. In addition, unlike a traditional IPO, direct listing has no book building, and the financial advisors do not facilitate price discovery (except on the opening price).[295] It is unknown whether other unicorns will choose this strategy in the future.[296]

2. Electronic Secondary Markets

The current practice of trading unicorn stocks on electronic secondary markets increases liquidity for individual investors but raises several issues. Certain unicorns allow their employees and capital investors to sell their shares on

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291 *See Spotify Case Study: Structuring and Executing a Direct Listing*, LATHAM & WATKINS (June 21, 2018), https://www.lw.com/thought Leadershipspotify-case-study-structuring-executing-direct-listing [https://perma.cc/Y6BG-YTAS] ("Spotify Technology S.A. went public on April 3, 2018 through a direct listing of its shares on the New York Stock Exchange.").

292 *See* Samuelson, *supra* note 28 ("Achieving a high price was nice for the sellers. It wasn't all that material for the company.").

293 Grabar et al., *supra* note 289 ("Spotify has one shareholder that has agreed with Spotify to hold onto its shares until 2020—the Chinese internet giant Tencent, which owns about 9%. The other shareholders have no similar limitations and no lock-ups.").

294 *See id.*

295 *See id.* Traditionally, companies use book-building price discovery mechanism. *Id.*

296 *See* John C. Coffee, Jr., *The Spotify Listing: Can an "Underwriter-less" IPO Attract Other Unicorns?*, CLS BLUE SKY BLOG (Jan. 16, 2018), http://clsbluesky.law.columbia.edu/2018/01/16/the-spotify-listing-can-an-underwriter-less-ipo-attract-other-unicorns/ [https://perma.cc/W5B9-6KS9].

secondary markets, using electronic platforms such as Nasdaq Private Market (formerly SecondMarket) and SharesPost.[297]

On the one hand, the "direct market is improving the liquidity of start-up stock for locked-in investors by lowering these transaction costs."[298] On the other, these markets also expose non-accredited investors to risks and uncertainties, due to current contractual arrangements and securities and tax laws.[299]

These platforms also raise other issues. First, unicorns are private and therefore their valuations are uncertain. For instance, a recent study by Gornall and Strabulaev finds huge discrepancies in the alleged worth of some unicorns, including Uber.[300] Second, both the sellers of the shares (whether investors or employees) and the unicorn are subject to the risk of lawsuits by buyers, due to omissions and misstatements, under the securities law. Finally, unicorns are concerned that allowing employees to trade on these platforms will trigger public registration requirements under section 12(g). Finally, unicorns are concerned that extensive use of these platforms

[297] *See* Ibrahim, *supra* note 147, at 22.

[298] *Id.*

[299] *See* Adi Osovsky, *The Curious Case of the Secondary Market with Respect to Investor Protection*, 82 TENN. L. REV. 83, 130 (2014) ("[T]he democratization of Secondary Market transactions exposes non-accredited investors to new risks and uncertainties."); *see also* Elizabeth Pollman, *Information Issues on Wall Street 2.0*, 161 U. PA. L. REV. 179, 182 (2012) (identifying and analyzing the information issues in the new online secondary markets).

[300] *See* Gornall & Strebulaev, *supra* note 176. The other restriction is with regards to companies that use the method of buybacks. "The deferral election is also not available if the issuing corporation bought back any outstanding stock in the preceding calendar year[.]" Lieberman, *supra* note 32; *see New Tax Act*, *supra* note 80 ("The legislative history for the TCJA is silent on why Section 83(i) restricts share repurchases; however, a sponsor of the Empowering Employees through Stock Ownership Act, which is very similar to Section 83(i), described employee stock ownership as 'a key tool for startups, allowing cash-poor innovators to recruit top talent.'"); *see also* Cable, *supra* note 5; Fan, *supra* note 5; Frier & Newcomer, *supra* note 8 ("[I]nvestors agree to grant higher valuations, which help the companies with recruitment and building credibility[.]").

and the related increase in their record shareholders would force them into an IPO.[301]

3. Secondary Sale to a Single Buyer

Unicorns are under pressure to seek liquidity. Therefore, in practice, many unicorns choose to facilitate a secondary sale of employees' shares to a single buyer (or an existing shareholder), so that the sale does not violate section 12(g).[302]

For example, on December 28, 2017, a number of Uber[303] shareholders, including Uber employees and early stage investors, were finally able to liquidate a portion of their shares via the tender offer of the Japanese technology conglomerate SoftBank.[304] Just a few weeks earlier, news broke that Uber employees were lining up to sell their stock to SoftBank. Some of these employees had to take on loans to exercise their options because they could not sell their shares

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[301] *See* Mary Jo White, Chair, SEC, Keynote Address at the SEC-Rock Center on Corporate Governance Silicon Valley Initiative (Mar. 31, 2016), https://www.sec.gov/news/speech/chair-white-silicon-valley-initiative-3-31-16.html [https://perma.cc/ap47-xd3w].

[302] Jumpstart Our Business Startups Act, Pub. L. 112-106 § 501, 126 Stat. 306, 325 (2012).

[303] Griswold, *supra* note 33.

[304] *See* Katie Roof, *SoftBank's Big Investment in Uber Comes to a Close*, TECHCRUNCH (Dec. 28, 2017), https://techcrunch.com/2017/12/28/softbanks-big-investment-in-uber-comes-to-a-close/ [https://perma.cc/V3EC-74ZN]; *see also* Greg Bensinger & Liz Hoffman, *SoftBank Succeeds in Tender Offer for Large Stake in Uber*, WALL ST. J. (Dec. 28, 2017), https://www.wsj.com/articles/softbank-succeeds-in-tender-offer-for-large-stake-in-uber-1514483283 (on file with the *Columbia Business Law Review*); Lieberman, *supra* note 32 ("The new rule evolved from a 2016 Senate bill sponsored by Senators Mark Warner and Dean Heller, the Empowering Employees Through Stock Ownership Act (SB3152), and a companion House bill (HR5719). The purpose was to provide an extended deferral period of up to seven years for employees who exercise options to buy the stock of private companies to ease the tax burden arising from equity grants covering shares that are not publicly traded.").

in the open market.[305] Luckily for these[306] Uber employees and investors, the deal went through and the tender offer provided them with an opportunity to liquidate and recover their upfront investment.[307] But what about all the other employees that were not permitted to participate, even on a pro rata basis?

V. RECOMMENDATIONS

In order to remove legal barriers to private ordering, this Article postulates that the current regulatory models need urgent amendments and comprehensive reform. The recent piecemeal amendments to the federal securities and tax laws do not solve the problems that unicorn firms are experiencing with attracting, engaging, and retaining talent. They also contribute to the unicorn employees' conflict of expectations and, as a result, the unicorn firms continue to renegotiate labor contracts with their employees.

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[305] New research studies examine the fair market value of startups worth over $1 billion. For instance, Gornall and Strebulaev find huge discrepancies in their purported worth. *See* Gornall & Strebulaev, *supra* note 176. On the skepticism about unicorn reported valuations, see also Robert P. Bartlett, III, *A Founder's Guide to Unicorn Creation: How Liquidation Preferences in M&A Transactions Affect Start-up Valuation*, *in* RESEARCH HANDBOOK ON MERGERS & ACQUISITIONS 123 (Claire A. Hill & Steven David Solomon eds., 2016) ("[A]chieving unicorn status provides a firm with added visibility to prospective employees and customers, giving it a potential competitive advantage over rival firms."); *see also* Cable, *supra* note 5; Fan, *supra* note 5; Frier & Newcomer, *supra* note 8 ("[I]nvestors agree to grant higher valuations, which help the companies with recruitment and building credibility").

[306] Current Uber employees were only allowed to sell half of their stake in the company, whereas former employees had no restrictions. Griswold, *supra* note 33.

[307] *See id.* ("To qualify for the tender offer, participants must have at least 10,000 Uber shares and be 'accredited investors,' an SEC designation . . . for wealthy individuals."); *see* Ilya Strebulaev, *Fair Value of Uber Estimated at $49 Billion*, LINKEDIN (Jan. 31, 2018), https://conferences.law.stanford.edu/vcs/wp-content/uploads/sites/11/2017/11/Fair-Value-of-Uber-Estimated-at-49-Billion-_-LinkedIn.pdf [https://perma.cc/DM3J-HPU6]; *see also* Gornall & Strebulaev, *supra* note 176.

Specifically, with regard to the tax law, section 83 needs to be amended to address current issues that employees and firms are dealing with in these new market dynamics. Securities law needs more transparency and information. The first step in this direction is to amend the law to count the number of employees towards the threshold of registration with the SEC.

A. Corporate Governance and Protection of Minority Shareholders

Unicorns are private firms with concentrated ownership. Should the law provide additional protection to the employees as minority shareholders? If so, what kind of protections would help?

It is necessary to protect unicorn employee-investors' collective interests for the following reasons. First, the employees (other than founders and senior managers) who are granted equity compensation are usually minority shareholders, if they hold shares at all, limiting their ability to use their votes or voice to influence company actions. As noted above, they are locked-in and cannot easily redeem their investment.

Second, the JOBS Act has extended the number of investors allowed in private companies before periodic reports are required under the Securities Exchange Act of 1934.[308] The increase in the number of non-traditional investors may create collective action problems. Due to this increase, investors may tend to be more rationally apathetic.

The intention and rationale behind the JOBS Act change is to facilitate emerging growth companies' "access to the public capital markets."[309] One way the Act attempted to do

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[308] Jumpstart Our Business Startups Act, Pub. L. No. 112-106, § 501, 126 Stat. 306, 325 (2012).

[309] Rose & Solomon, *supra* note 163, at 84; *see also* Usha Rodrigues, *Securities Law's Dirty Little Secret*, 81 FORDHAM L. REV. 3389 (2013); Robert B. Thompson & Donald C. Langevoort, *Rewarding the Public-Private Boundaries in Entrepreneurial Capital Raising*, 98 CORNELL L. REV. 1573 (2013); Usha Rodrigues, *The JOBS Act at Work*, CONGLOMERATE (Sept. 11,

so was by reducing some of the Sarbanes-Oxley Act regulatory requirements in the hope of encouraging private companies to go public.[310]

The JOBS Act's biggest achievement is "radical deregulation"[311] by exempting more private firms from complying with the federal periodic disclosure requirements.[312] U.S. firms have been subjected to these requirements since 1964.[313] For example, as mentioned above, the JOBS Act changed the threshold that triggers registration with the SEC. Employees receiving equity grants no longer count as investors, and the number of accredited investors that necessitates certain public reporting increased from 500 to 2,000.[314]

2015), http://www.theconglomerate.org/jobs-act/ [https://perma.cc/6WZL-NYGS] (criticizing the JOBS Act's unrealistic endeavors to boost IPOs).

[310] *See* Solomon & Rose, *supra* note 163, at 3 ("The JOBS Act is primarily a response to the regulatory theory, but also takes some aims towards market structure by loosening restrictions on research analysts.").

[311] *See Examining Investor Risks in Capital Raising: Hearing Before the Subcomm. on Sec., Ins., and Inv. of the S. Comm. on Banking, Hous., & Urban Affairs*, 112th Cong. 4–6 (2011) (statement of John Coates, Professor of Law and Economics, Harvard Law School) (noting that the provisions changing the shareholders of record trigger were "the most risky of the proposals" and provided an example of "radical deregulation"). Coates also suggested the need to use a better measure of share ownership than the increasingly antiquated concept of "record holders," and offered as alternatives a firm's public float or market valuation. *Id.*; *see also* Michael D. Guttentag, *Patching a Hole in the JOBS Act: How and Why to Rewrite the Rules That Require Firms to Make Periodic Disclosures*, 88 IND. L.J. 151, 175 (2013).

[312] *See* Guttentag, *supra* note 311, at 152 ("Firms were first federally required to publicly disclose information on an ongoing basis with the passage of the Securities Exchange Act of 1934[.]").

[313] For more on federal periodic disclosure requirements ("FDPRs") compliance and history, see *id.* at 153 ("After almost eighty years of federal rules requiring firms of various types to comply with FPDRs and a recently enacted substantial change to these rules, how best to determine when firms should be required to comply with these FPDRs still remains largely an enigma.").

[314] *See* Garrett A. DeVries, *SEC Approves Final Rules Implementing JOBS Act and FAST Act*, AKIN GUMP (May 13, 2016),

Although the JOBS Act sought to boost the IPO market, it unfortunately leaves employees vulnerable as investors in their companies and subject them to the discretion of majority shareholders. Historically, according to Fan[315] and Cable,[316] the securities laws were designed to protect employees. However, as a result of the deregulation efforts in the last few years, it is less likely that privately held unicorns will have to provide their employees with disclosure and information.[317]

Other authors consider employees of startups as insiders (sometimes even as gamblers or lottery winners) who are well-positioned to monitor their company's progress.[318]

https://www.akingump.com/en/experience/practices/corporate/ag-deal-diary/sec-approves-final-rules-implementing-jobs-act-and-fast-act.html [https://perma.cc/2YWE-REKC].

[315] *See* Fan, *supra* note 5 (recommending that unicorn companies be subject to a scaled disclosure regime); *see also* Pollman, *supra* note 299 (exploring the development of secondary markets for startup company stock and suggesting scaled disclosure requirements); Jeff Schwartz, *The Law and Economics of Scaled Equity Market Regulation*, 39 J. CORP. L. 347 (2014) (outlining the costs and benefits of scaled regulation of large private companies); Jeff Schwartz, *The Twilight of Equity Liquidity*, 34 CARDOZO L. REV. 531 (2012) (arguing for a "lifecycle model" of securities regulation that would adapt to firm age); Thompson & Langevoort, *supra* note 309 at 1625–27 (calling for legislative reforms to reduce regulation for large private companies and advocates for enhanced regulation of broker-dealers as an alternative approach).

[316] Cable, *supra* note 5, at 616.

[317] *See id.* ("Private placement regulation, like other areas of law, traditionally viewed employees as vulnerable . . . . In recent decades, however, the [SEC] and Congress have essentially deregulated equity compensation by providing increasingly generous registration exemptions for equity grants to service providers. What is the basis for this policy change?").

[318] For further discussion on employee incentives, see generally Robert Anderson IV, *Employee Incentives and the Federal Securities Laws*, 57 U. MIAMI L. REV. 1195 (2003) (discussing the status of employee options as securities); Matthew T. Bodie, *Aligning Incentives with Equity: Employee Stock Options and Rule 10b-5,* 88 IOWA L. REV. 539 (2003) (focusing on the availability of Rule 10b-5 actions); Jensen & Murphy, *supra* note 14, at 138 (advocating for equity compensation as a form of incentive-based executive pay); Smith, *supra* note 14 (focusing on the law and economics of equity compensation as private ordering).

Presumably their economic incentives are aligned with the those of the founders'. Moreover, employees are protected by investors, such as VC investors, who can sanction the founders for bad behavior. Even if this may be the case for employees of small or medium-sized startups, this is not true for unicorn employees who work for larger, quasi-public companies.[319]

Third, mutual funds often have aggressive redemption rights.[320] In the event that mutual fund investors exercise these rights, by asking to redeem their investment and cash out, the unicorn can face cash shortages and will most likely be compelled to raise new capital under unfavorable terms, if it is available at all. It is also very likely that the firm will go bankrupt. Although VCs sometimes also have redemption rights, they have rarely utilized them.[321] Open-ended mutual funds may be more likely to demand redemption in a down market to raise the cash necessary to fund redemptions by their own shareholders.

Finally, founders are sometimes able to control the board of directors with super voting rights or other arrangements, which enhance their power within the firm. It is also questionable whether the interests of all common shareholders are aligned. A university endowment fund may be a more patient investor than a cash-strapped individual trying to buy a house or fund a child's education.

Despite these issues, regulators and policymakers keep promulgating new regulations that enable companies to raise

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[319] *See* Cable, *supra* note 5, at 616–17.

[320] Chernenko et al., *supra* note 4, at 32 ("Having to carefully manage their own liquidity, mutual funds require stronger redemption rights along both the intensive and extensive margins, suggesting contractual choices consistent with the funds' reliance on redeemable funding.").

[321] *See* Giulio Girardi, Christof W. Stahel & Youchang Wu, Cash Management and Extreme Liquidity Demand of Mutual Funds 1 (June 21, 2017) (unpublished manuscript), https://www.sec.gov/files/DERA_WP_Girardi-Stahel-Wu_Cash%20Management%20and%20Extreme%20Liquidity%20Demand.pdf (on file with the *Columbia Business Law Review*).

large amounts of private capital.[322] In fact, the SEC is working on new rules that are intended to open up private markets to non-accredited investors. One of the issues that the SEC will confront is whether unicorns "should have an easier way to compensate their workers by giving them stock in the company." [323]

B. Reform to Recent Regulatory & Legislative Developments

This Section provides examples of current legislation that are meant to continue to tie employees to these private companies, even though employees are experiencing liquidity challenges, their ownership is subject to forfeiture (in the event they leave the company), and their equity ownership does not typically come with voting or monitoring rights. Other means of averting knowledge leakage, such as non-compete provisions, are not enforceable in California except in connection with the sale of an entire business.[324] The illiquidity problem for unicorn shares has therefore affected the ability of startups to attract, retain, and engage talent. In order to continue to attract talent by providing equity

[322] The other legislation includes: (1) the Financial CHOICE Act of 2017, which includes modernizing the Regulation D offering process and creates "venture exchanges;" and (2) crowdfunding regulations that were adopted by the SEC that allow companies to use a crowdfunding platform (as an intermediary) for raising small amounts of equity capital (less than $1 million dollars annually) from potentially large pools of investors over the internet. *See* Joan MacLeod Heminway, *Investor and Market Protection in the Crowdfunding Era: Disclosing to and for the "Crowd,"* 38 VT. L. REV. 827, 830 (2014). Regulation A+ of Title IV of the JOBS Act also increased the cap on a private company's unregistered public offering to $50 million in any twelve-month period. However, companies raising capital under Regulation D can only accept investments from accredited investors and a limited number of non-accredited investors, whereas companies that use Regulation A+ are able to accept funds from the public in larger numbers, including from both accredited and non-accredited investors. *See* Thompson & Langevoort, *supra* note 309.

[323] *See* Michaels, *supra* note 17.

[324] *See* Lazonick, *supra* note 43.

compensation, various interest groups, including the National Venture Capital Association and unicorn founders, have been lobbying Congress for new laws and regulations.[325]

1. Economic Growth, Regulatory Relief, and Consumer Protection Act

On May 24, 2018, President Trump signed into law the Economic Growth, Regulatory Relief, and Consumer Protection Act (the "Economic Growth Act").[326] This act requires the SEC to amend Rule 701[327] under Regulation D to increase, from $5 million to $10 million, the amount of securities that an eligible non-public company can offer or sell to employees for compensatory purposes (including stock options and restricted stock units) during a twelve-month period without having to register the securities under the Securities Act of 1933.[328]

Although the SEC initially adopted Rule 701 in 1988 to promote entrepreneurship by reducing the securities-law compliance costs borne by small and medium-sized non-public

[325] Press Release, Nat'l Venture Capital Ass'n, House Bill to Defer Tax Liability on Startup Stock Options Will Strengthen Entrepreneurial Ecosystem (Sep. 14, 2016), https://nvca.org/pressreleases/house-bill-defer-tax-liability-startup-stock-options-will-strengthen-entrepreneurial-ecosystem/ [https://perma.cc/J856-YWYC].

[326] *See* Samuel R. Woodall III, Mitchell S. Eitel, Michael T. Escue, C. Andrew Gerlach, Camille L. Orme, Benjamin H. Weiner & Michael A. Wiseman, *"Economic Growth, Regulatory Relief, and Consumer Protection Act" is Enacted*, PROGRAM ON CORP. COMPLIANCE & ENFORCEMENT BLOG AT N.Y.U. SCH. OF L. (JUNE 5, 2018), https://wp.nyu.edu/compliance_enforcement/2018/06/05/economic-growth-regulatory-relief-and-consumer-protection-act-is-enacted/ [https://perma.cc/AKG9-VPTT].

[327] *See* Gary Shorter, *Employee Ownership of Registration-Exempt Company Securities: Proposals to Reform Required Corporate Disclosures (Section 507 of S. 2155, S. 488, H.R. 1343, and Section 406 of H.R. 10)*, FED'N AM. SCIENTISTS (Apr. 3, 2018), https://fas.org/sgp/crs/misc/IN10680.pdf [https://perma.cc/F422-CNEK].

[328] *See* 17 C.F.R. § 230.701 (2018).

companies,[329] the heightened threshold applies to unicorns and other large, privately held companies.

By raising the employee sales cap to $10 million, Congress has encouraged employees to share in the ownership of even very large firms[330] without requiring the companies to provide enhanced disclosure. This limits employees' ability to make informed decisions about whether to exercise their options and buy illiquid unicorn stock. Unicorns that remain below the $10 million threshold are required to provide their employees only with a copy of the benefit plan (or compensatory contract) under which their securities were granted.[331] If unicorns do not limit their employee offerings to come within the new $10 million threshold, then and only then, will they be required to provide their employees with detailed financial statements and risk factor disclosures.[332]

The Economic Growth Act makes it easier for unicorn firms to stay private longer without addressing the illiquidity issues employees face when deciding whether to exercise employee stock options. Further, it leaves employees holding potentially tens of millions of dollars of illiquid stock at the mercy of the majority, without access to detailed financial statements or adequate disclosures of risks and prospectuses to help guide their investment decisions. This law encourages employees to

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329 Exempt Offerings Pursuant to Compensatory Arrangements, 83 Fed. Reg. 34,940 (July 24, 2018).

330 *See* DAVID W. PERKINS, DARRYL E. GETTER, MARC LABONTE, GARY SHORTER, EVA SU & N. ERIC WEISS, CONG. RESEARCH SERV., R45073, ECONOMIC GROWTH, REGULATORY RELIEF, AND CONSUMER PROTECTION ACT (P.L. 115-174) AND SELECTED POLICY ISSUES (2018), https://fas.org/sgp/crs/misc/R45073.pdf [https://perma.cc/AL32-8DLM].

331 *See* Erin Randolph-Williams, Alan Singer & Lauren E. Sullivan, *Major Change in Rule 701 Disclosure Requirements*, MORGAN LEWIS BLOG (June 21, 2018), https://www.morganlewis.com/blogs/mlbenebits/2018/06/major-change-in-rule-701-disclosure-requirements [https://perma.cc/4SVC-D8VH]; Shorter, *supra* note 327.

332 For purposes of Rule 701's limitations on sales and the enhanced disclosure threshold, a sale is deemed to occur at the time of the grant of a stock option rather than at the time of exercise of the option. *See* Randolph-Williams et al., *supra* note 331.

accept their firm's stock rather than diversify their investments.[333]

The purpose of the recent amendments to the securities laws was to give young startup companies time to mature and become more attractive as IPO candidates. Unfortunately, these amendments also created a problem for the firms and their employees. They did not take into account that employee stock options expire during this period.

i. Mandatory Disclosure Requirements

One of the main problems with unicorn employee stock option plans is that employees are uninformed about their rights and the status of the company. In order to make an investment decision to exercise or forfeit their options, they need information.[334] Unicorn firms rely on the exemption under Rule 701 to not provide employees with enhanced disclosure. This must change.[335] These firms must provide employees with enhanced information, especially concerning the risks associated with investing in illiquid securities of a high-risk venture that is often controlled by founders who lack

333 *See Legislative Proposals to Enhance Capital Formation and Reduce Regulatory Burdens, Part II, Hearing Before the Subcomm. on Capital Mkts. and Gov't Sponsored Enters., H. Comm. on Fin. Servs.,* 114th Cong. 22 (2015) (statement of Mercer E. Bullard, President and Founder, Fund Democracy, Inc. and MDLA Distinguished Lecturer and Professor of Law, University of Mississippi School of Law), https://financialservices.house.gov/uploadedfiles/hhrg-114-ba16-wstate-mbullard-20150513.pdf (on file with the *Columbia Business Law Review*) ("Rule 701 offerings should 'encourage' offerings that actually increase the number of employees who own company stock while 'discouraging' offerings that result in overconcentration in the percentage of employees' portfolios invested in company stock. The Encouraging Employee Ownership Act does precisely the opposite.").

334 The U.S. Supreme Court made it clear that employee status, taken alone, does not guarantee access to material information. SEC v. Ralston Purina Co., 346 U.S. 119, 126 (1953).

335 *See* STEPHEN J. CHOI & A.C. PRITCHARD, SECURITIES REGULATION 23 (2008). The purpose of the Securities Act of 1933 is "[t]o provide full and fair disclosure of the character of securities sold." *Id.*

management experience.[336] At least some level of disclosure (or a fairness hearing conducted under a new federal provision akin to section 3(b) of the Securities Act of 1933) should be mandated, and could perhaps be included in state blue sky laws.[337] This would most likely require tweaks to federal law to avoid federal preemption, but to avoid an overly onerous process, the state and federal laws could be amended to permit those states with at least a designated percentage of the employees (perhaps thirty-three percent) to require disclosure or a fairness hearing. Further, only firms with outstanding equity issued for at least a specified amount (perhaps $200 million) should be subject to the highest level of disclosure.

In order to mitigate some of the risks that are associated with their employees' investment, the mandatory disclosures should include the following information to employees. First, in addition to the stock option purchase agreement and plan, the firm should provide a schedule with the amount of capital that was raised by the company prior to that point. The schedule should include a list of investors that received liquidation preferences, and founders that were granted super voting common stock.

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[336] *See* Eric Newcomer & Joel Rosenblatt*, Here's the Uber Investor Letter That Forced Travis Kalanick Out*, BLOOMBERG (Jan. 28, 2019), https://www.bloomberg.com/news/articles/2019-01-28/here-s-the-uber-investor-letter-that-forced-travis-kalanick-out [https://perma.cc/KKZ4-ASKX].

[337] The California Corporations Code gives the Commissioner of Corporations the authority to conduct such hearings in the case of securities issuances in connection with mergers and other business combinations. *See Corporations Fairness Hearings*, CAL. DEP'T OF BUS. OVERSIGHT, http://www.dbo.ca.gov/ENF/FairnessHearings/Default.asp [https://perma.cc/DJ8R-L9MZ]("California Corporations Code section 25142 allows companies interested in issuing securities in a merger or conducting an exchange of outstanding securities to seek a 'fairness' hearing as part of its application for qualification of the offer and sale of securities. By this process, applicants may seek an exemption from federal registration as provided by Section 3(a)(10) of the Securities Act of 1933 through a state-law hearing on the fairness of the terms and conditions of the proposed issuance or exchange of securities.").

Second, the firm should disclose to employees how much debt it has accumulated, including debt evidenced by convertible or SAFE notes. Third, if companies allow employees to trade on secondary platforms, the companies should provide appropriate disclosures, including any restrictions on resale, to make sure that employees understand and comply with the applicable securities regulations. If the companies do not allow employees to trade on secondary platforms, they should consider facilitating private secondary market sales or stock buybacks to provide liquidity.[338]

Fourth, disclosure should include information on the composition and compensation of the management team, information concerning current and future stock and debt issuances, a list of investors holding more than a specified percentage (perhaps one percent) of the outstanding stock (including their liquidation preferences and conversion rights), and a quarterly estimated fair market value of the stock. They should also provide employees with the assistance of an experienced and independent purchaser representative.

Finally, unicorns should be required to be audited by an independent auditor before issuing equity compensation to unaccredited or unsophisticated purchasers above a stated threshold amount. If a company is raising money at a billion-dollar valuation, the cost of such an audit should not be overly burdensome. The employees granted equity compensation should have access to and be entitled to rely on these reports.

These disclosures can improve efficiency and reduce information asymmetries, and produce increasingly equitable and sustainable employee participation in unicorn companies.

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[338] *See* Ric Marshall, Panos Seretis & Agnes Grunfeld, *Taking Stock: Share Buybacks and Shareholder Value*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Aug. 19, 2018), https://corpgov.law.harvard.edu/2018/08/19/taking-stock-share-buybacks-and-shareholder-value/ (on file with the *Columbia Business Law Review*) (finding no compelling evidence of a negative impact from share buybacks on long-term value creation for investors overall).

ii. Naïve Employees

Rule 701 was intended for small businesses and not large, cash-hoarding unicorns. Rank-and-file employees might be naïve investors,[339] and, although they are insiders in the firm, they will need to decide whether to exercise or forfeit their options without a guarantee that there will be an IPO in the future. Additionally, most employees would not be able to bargain away from the predominant practice of equity incentive plans, because to do so might send a hostile signal to the market and to their employer, which they would like to avoid.[340]

Perhaps the approach should go even further, and require that unicorns adhere to the same financial disclosure requirements as public companies. Mandating such disclosure might encourage unicorns to do an IPO, as they will be required to incur the expenses and disclosure obligations of public companies. Facebook, for example, did an IPO because it had reached the maximum threshold of shareholders of record (then 500) and thus was forced to become a "reporting" company under section 12(g) of the 1934 Act.[341] Once Facebook was required to adhere to these financial disclosure requirements, the downsides of an IPO were limited, and the company went public.

339 For more on naïve employees, see Ryan Bubb, Patrick Corrigan & Patrick L. Warren, *A Behavioral Contract Theory Perspective on Retirement Savings*, 47 CONN. L. REV. 1317, 1323 (2015), who criticize federal retirement plans policy. They postulate that employees are naïve and the current structure of the labor market gives employers strong incentives to offer matching contributions that exploit the employees. *See id.*

340 *See* Rock & Wachter, *supra* note 101.

341 *See Government-Business Forum on Small Business Capital Formation: Hearing Before the Securities and Exchange Commission* (2011) (*Capital Formation, Job Creation and Congress: Private Versus Public Markets*, statement of John C. Coffee, Jr., Adolf A. Berle Professor of Law, Columbia University Law School, and Director of its Center on Corporate Governance), https://www.sec.gov/info/smallbus/sbforum111711-materials-coffee.pdf [https://perma.cc/PTY2-V2D7].

2. Tax Cuts and Jobs Act

The National Venture Capital Association and the company Palantir Technologies (a well-known Silicon Valley data analytics unicorn)[342] registered to lobby Congress on both the House and Senate versions of the Empowering Employees Through Stock Ownership Act.[343] The new Tax Act incorporated certain sections from both versions of this act. The purpose of these changes was to encourage broad based equity compensation, incentivize employees to take an ownership stake in their firms by providing an extended deferral period, and allow startups to continue to use options as a tool to attract, retain and engage talent.

One important change in the new Tax Act was in the new Internal Revenue Code section 83(i), which allows individuals, if certain conditions are met (such as the underlying stock is

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342 Palantir is a data analytics unicorn that got an early investment (in 2005) from In-Q-Tel, the CIA's venture capital arm. *See* William Alden, *Palantir's Relationship with America's Spies Has Been Worse than You'd Think*, CNBC (Apr. 21, 2017), https://www.cnbc.com/2017/04/21/buzzfeed-palantir-loses-relationship-with-nsa-ceo-karp-bashes-trump.html (on file with the *Columbia Business Law Review*); *see also* Paul Szoldra, *14 Cutting Edge Firms Funded by the CIA*, BUS. INSIDER (Sept. 21, 2016), http://www.businessinsider.com/companies-funded-by-cia-2016-9 [https://perma.cc/29FT-SA72]. For more on In-Q-Tel, see Anat Alon-Beck, *The Coalition Model, a Private-Public Strategic Innovation Policy Model for Encouraging Entrepreneurship and Economic Growth in the Era of New Economic Challenges*, 17 WASH. U. GLOBAL STUD. L. REV. 267, 300–01 (2018). During the time of its establishment, the idea of a government-funded venture capital firm was entirely novel. *See* Steve Henn, *In-Q-Tel: The CIA's Tax-Funded Player In Silicon Valley*, NPR (July 16, 2012), http://www.npr.org/blogs/alltechconsidered/2012/07/16/156839153/in-q-tel-the-cias-tax-funded-player-in-silicon-valley [https://perma.cc/8SPA-G52K] ("Much of the touch-screen technology used now in iPads and other things came out of various companies that In-Q-Tel identified."); *see also* JOSH LERNER, BOULEVARD OF BROKEN DREAMS 176 (2012) ("[T]he challenges of breaking into government procurements were daunting."); *see also Palantir Technologies*, CB INSIGHTS, https://www.cbinsights.com/company/palantir-technologies [http://perma.cc/T6EN-JF37].

343 *See* McKenna, *supra* note 181.

eligible stock and the corporation is an eligible corporation),[344] to defer tax liability on the income earned from exercising options (or settlement of RSUs) for up to five years.[345] This intended to mitigate the problem described above concerning NSOs (and RSUs). Once employees exercise their options (or settle their RSUs), they have to pay tax immediately on profit that might never materialize. Employees have to pay out of pocket for both the strike price and the tax, and some employees might not be able to raise enough cash to pay for these expenses due to their firms' high valuations.[346]

[344] The conditions include: (1) the underlying stock must be eligible stock; and (2) the corporation must be an eligible corporation. "The new rule evolved from a 2016 Senate bill, sponsored by Senators Mark Warner and Dean Heller, the Empowering Employees Through Stock Ownership Act (SB3152), and a companion House bill (HR5719)." Lieberman, *supra* note 32.

[345] If an employee with ISOs will choose to make a section 83(i) election, it will negate the preferential tax treatment, and will convert the ISO to an NSO. *Id.* The other restriction is with regards to companies that use the method of buybacks.

> The deferral election is also not available if the issuing corporation bought back any outstanding stock in the preceding calendar year, unless not less than 25% of the total amount the company bought back is stock for which a Section 83(i) deferral election is in effect and the buyback's eligibility criteria are made on a reasonable (non-discretionary) basis.

Id.

[346] *See Practical Implications of Section 83(i) Option and RSU Tax Deferral*, WILSON SONSINI GOODRICH & ROSATI (June 19, 2018), https://www.wsgr.com/WSGR/Display.aspx?SectionName=publications/PDFSearch/wsgralert-section-83i.htm [https://perma.cc/52MC-DGL2]. Exercising incentive stock options can trigger the alternative minimum tax. *See Fundamentals of Equity Compensation*, PAYSA, https://www.paysa.com/resources/fundamentals-of-equity-compensation [https://perma.cc/DKW3-X9J8]. Although Congress did not repeal the alternative minimum tax, it significantly increased the income exemption and phase-out amounts, leaving fewer startup employees who receive stock options subject to the tax. *See Six Ways Tax Reform Affects Your Stock Compensation and Financial Planning*, MYSTOCKOPTIONS.COM,

As noted above, some unicorns allow their employees to sell the share on secondary market platforms,[347] but this approach is not efficient. Section 83(i) discourages this practice, and a unicorn that allows its employees to trade on a secondary market platform will not be able to use this new deferral.[348]

Section 83(i) is also not applicable to early employees who made a section 83(b) election.[349] As a result, early startup employees are often chained by golden handcuffs, and it is possible that many of them started working for the startup without knowing that it would turn into a unicorn. Many startups encourage early employees to make an 83(b) election., which allows employees to exercise their options before they are vested, so that they can pay taxes before the vesting date, when the stock has not appreciated yet.[350]

Time and future Treasury Department regulations will tell whether this change will make it easier for unicorn employers to continue to use equity compensation plans as a retention tool. There are several issues that need to be clarified. For example, according to the current statutory language, it is not clear if the five-year period begins from the vesting or exercise date. Additionally, the section requires companies to determine and monitor the eligibility of their employees (and themselves) and become subject to additional tax reporting.[351]

https://www.mystockoptions.com/articles/index.cfm/ObjectID/22615723-D31E-CCDF-68284D3C456C3E3A [https://perma.cc/HJ6Z-ANGT].

[347] *See* Eliot Brown & Greg Bensinger, *The Latest Path to Silicon Valley Riches: Stake Sales*, WALL ST. J. (Nov. 19, 2017), https://www.wsj.com/articles/investment-firms-buy-stock-in-startups-long-before-ipos-1511045818 (on file with the *Columbia Business Law Review*).

[348] *See New Tax Act*, *supra* note 80 ("The drafters of the bill may have thought that companies that have enough cash to repurchase shares should have enough cash to net settle employee stock options and RSUs and therefore should not be the beneficiaries of a tax deferral opportunity for 'cash-poor innovators.'")

[349] *See Practical Implications of Section 83(i) Option and RSU Tax Deferral*, *supra* note 346; *see also* Fosse & Garrett, *supra* note 257.

[350] *See New Tax Act*, *supra* note 80.

[351] *See New Tax Act*, *supra* note 80.

There is a need for guidance on whether or not unicorn employees that trade on secondary markets can use section 83(i). Currently, companies with stock traded on an "established securities market" cannot use this new section, and practitioners interpret this limitation to include secondary markets.[352]

One of the main requirements is that the company must offer the options (or RSUs) to eighty percent of its employees.[353] Some companies might not use it, as it broadens their shareholder base. Moreover, companies also have to comply with other existing U.S. federal and state "blue sky" securities laws, which might preclude companies from using such broad-based issuance of options or RSUs to employees.

Section 83(i) also restricts two recent practices that allow private companies to give a temporary liquidity event to employees. It restricts a company's ability to do a stock repurchase, and it does not allow employees to sell on secondary market platforms, in the previous calendar year.

Section 83(i) allows some employees to defer some of the tax liability for up to five years, but it does not solve the urgent need for liquidity. There are several problems that can arise after an employee makes the deferral. First, if after five years, there is no imminent liquidity event and the company elects to stay private longer, the employee is again faced with a dilemma—to forfeit or to exercise? Employees again will have to pay the taxes in cash without knowing whether the imputed gain will ultimately be realized. Second, if, after the deferral, there is a loss (because the value of the stock has diminished), the employee is still obligated to pay taxes on the exercise or vesting.

352 *See* Lydia O'Neal, *New Tax Law's Equity Grant Rule Not Too Useful for Startups*, BLOOMBERG BNA (Jan. 30, 2018), https://www.bna.com/new-tax-laws-n73014474870/ [https://perma.cc/NV5R -WE89].

353 *See New Tax Act*, *supra* note 80.

VI. CONCLUSION

In the new economy, knowledgeable employees are incredibly important to the firm, as their knowledge contributes to the firm's intangible assets.[354] To attract, engage, and retain talent, unicorn firms must find ways to continue to offer employees equity (and a promise of equity) and facilitate liquidity opportunities.

There are legal barriers to private ordering, which preclude unicorn firms from using traditional employee stock option plans. The recent piecemeal amendments to the federal securities and tax laws, which attempted to remove these barriers, have not been beneficial and have contributed to the issues that were raised herein. A comprehensive regulatory and legislative reform is needed. Finally, by providing employees with liquidity and adequate disclosures that can improve efficiency and reduce information asymmetries, unicorns, as well as their managers and boards, will reduce the likelihood of massive fraud. Liquidity opportunities and information will encourage employees to continue to exchange their creativity and hard work for the equity needed for the game-changing innovations necessary for American competitiveness in the global marketplace.[355]

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354 For example, the intangible assets can take the form of a patent, a trade secret, or a list of customers. *See* DELONG, *supra* note 58, at 7. ("Much of the capital value of the company may reside in the brains of the workers, not in identifiable physical capital.").

355 As so aptly put in *Basic v. Levinson*, "Who would knowingly throw the dice in a crooked crap game?" 485 U.S. 224, 247 (1988).